

MEMPHIS STATE UNIVERSITY BULLETIN

CATALOG ISSUE 1965-1966



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Inquiries will receive prompt attention if addressed to the administrative officers indicated below, at Memphis State University, Memphis, Tennessee 38111.

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BULLETIN OF MEMPHIS STATE UNIVERSITY

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BULLETIN OF
MEMPHIS STATE
UNIVERSITY

CATALOG

1965-66

*The Fifty-fourth Session will open
Friday, September 17, 1965*

MEMPHIS, TENNESSEE

FEBRUARY, 1965

1965														
SEPTEMBER							NOVEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
			1	2	3	4			1	2	3	4	5	6
5	6	7	8	9	10	11	7	8	9	10	11	12	13	
12	13	14	15	16	17	18	14	15	16	17	18	19	20	
19	20	21	22	23	24	25	21	22	23	24	25	26	27	
26	27	28	29	30			28	29	30					
OCTOBER							DECEMBER							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
				1	2				1	2	3	4		
3	4	5	6	7	8	9	5	6	7	8	9	10	11	
10	11	12	13	14	15	16	12	13	14	15	16	17	18	
17	18	19	20	21	22	23	19	20	21	22	23	24	25	
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31														
1966														
JANUARY							MAY							
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9	10	11	12	13	14	15	15	16	17	18	19	20	21	
16	17	18	19	20	21	22	22	23	24	25	26	27	28	
23	24	25	26	27	28	29	29	30	31					
30	31													
FEBRUARY							JUNE							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
		1	2	3	4	5			1	2	3	4		
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13	14	15	16	17	18	19	12	13	14	15	16	17	18	
20	21	22	23	24	25	26	19	20	21	22	23	24	25	
27	28						26	27	28	29	30			
MARCH							JULY							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
		1	2	3	4	5			1	2	3	4		
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13	14	15	16	17	18	19	10	11	12	13	14	15	16	
20	21	22	23	24	25	26	17	18	19	20	21	22	23	
27	28	29	30	31			24	25	26	27	28	29	30	
APRIL							AUGUST							
S	M	T	W	T	F	S	S	M	T	W	T	F	S	
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10	11	12	13	14	15	16	14	15	16	17	18	19	20	
17	18	19	20	21	22	23	21	22	23	24	25	26	27	
24	25	26	27	28	29	30	28	29	30	31				

THE UNIVERSITY CALENDAR

1965-1966

FIRST SEMESTER

- SEPTEMBER 17, FRIDAY: Meeting of the University faculty, 9:00 A.M., University Auditorium.
- SEPTEMBER 18, SATURDAY: Meetings of the University faculty by schools and departments, 9:00 A.M.
- SEPTEMBER 19, SUNDAY: Dormitories will open at noon.
- SEPTEMBER 20, MONDAY through SEPTEMBER 25, SATURDAY: Registration week. For detailed dates and times see *The Schedule of Classes* for the Fall Semester, 1965-66.
- SEPTEMBER 27, MONDAY: Classes meet as scheduled.
- SEPTEMBER 27, MONDAY: Orientation and registration for new Evening Division students, 7:00 P.M.
- SEPTEMBER 28, TUESDAY: Registration, The Evening Division, 5:00 P.M.
- OCTOBER 1, FRIDAY: Last day for adding courses.
- OCTOBER 8, FRIDAY: Holiday. West Tennessee Education Association.
- OCTOBER 15, FRIDAY: Last day for dropping courses.
- OCTOBER 22, FRIDAY: Last day for making application to dean of appropriate school for degrees to be conferred in January, 1966.
- NOVEMBER 11, THURSDAY: Holiday. Veterans' Day.
- NOVEMBER 22, MONDAY: Mid-Semester deficiency reports due in Records Office.
- NOVEMBER 25, THURSDAY through NOVEMBER 28, SUNDAY: Thanksgiving Recess.
- NOVEMBER 30, TUESDAY: English proficiency examination.
- DECEMBER 19, SUNDAY through JANUARY 2, SUNDAY: Christmas recess.
- JANUARY 21, FRIDAY: Final examinations begin.
- JANUARY 29, SATURDAY: Commencement, 10:00 A.M.

SECOND SEMESTER

FEBRUARY 5, SATURDAY:	Registration, The Graduate School, 9:00 A.M.
FEBRUARY 6, SUNDAY:	Dormitories will open at noon.
FEBRUARY 7, MONDAY <i>through</i>	Registration. For detailed dates and times see <i>The Schedule of Classes</i> for the Spring Semester, 1966.
FEBRUARY 9, WEDNESDAY:	
FEBRUARY 10, THURSDAY:	Classes meet as scheduled.
FEBRUARY 16, WEDNESDAY:	Last day for adding courses.
MARCH 2, WEDNESDAY:	Last day for dropping courses.
MARCH 11, FRIDAY:	Last day for making application to dean of appropriate school for degrees to be conferred in May, 1966.
MARCH 28, MONDAY:	Mid-term deficiency reports due in Records Office.
MARCH 29, TUESDAY:	English proficiency examination.
APRIL 7, THURSDAY <i>through</i>	
APRIL 10, SUNDAY:	Easter recess.
MAY 20, FRIDAY:	Final examinations begin.
MAY 28, SATURDAY:	Commencement, 10:00 A.M.

THE SUMMER SESSION, 1966

FIRST TERM

JUNE 8, WEDNESDAY:	Dormitories will open at noon.
JUNE 9, THURSDAY and	Registration. For detailed dates and times see <i>The Schedule of Classes</i> for The Summer Session, 1966.
JUNE 10, FRIDAY:	
JUNE 13, MONDAY:	Classes meet as scheduled.
JUNE 15, WEDNESDAY:	Last day for adding first-term courses.
JUNE 17, FRIDAY:	Last day for dropping first-term courses.
JUNE 21, TUESDAY:	English proficiency examination.
JUNE 24, FRIDAY:	Last day for dropping two-term courses.
JULY 4, MONDAY:	Holiday. Independence Day.
JULY 14, THURSDAY:	Final examinations.

SECOND TERM

JULY 18, MONDAY:	Registration. For detailed dates and times see <i>The Schedule of Classes</i> for The Summer Session, 1966.
JULY 19, TUESDAY:	Classes meet as scheduled.
JULY 21, THURSDAY:	Last day for adding second-term courses.
JULY 22, FRIDAY:	Last day for making application to appropriate school dean for degrees to be conferred in Auugst, 1966.
JULY 25, MONDAY:	Last day for dropping second-term courses.
AUGUST 2, TUESDAY:	English proficiency examination.
AUGUST 18, THURSDAY:	Final examinations.
AUGUST 20, SATURDAY:	Commencement, 10:00 A.M.



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Part One

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STAFF OF THE UNIVERSITY

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The Director of The Summer Session

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THE FACULTY

- WILLIAM CARTER ABBETT (1949), *Assistant Professor of English*
 B.S., 1948, Memphis State University; M.A., 1949, Vanderbilt University.
- CHARLES SHELTON AIKEN (1962), *Instructor in Geography*
 B.S., 1960, Memphis State University; M.A., 1962, University of Georgia.
- JESS MCFADDEN ALEXANDER (1964), *Assistant Professor of Art*
 B.A., 1926, Winthrop College; M.A., 1946, Teachers' College, Columbia University.
- HERBERT GRAVES ALLBRITTON (1963), *Associate Professor of Chemistry*
 B.S., 1931, Murray State College; M.S., 1941, University of Kentucky; Ph.D., 1951, The Pennsylvania State University.
- MILDRED B. ALGEE (1953), *Instructor in Library Service*
 B.S., 1931, Union University; M.A., 1951, George Peabody College.
- CHARLENE JAYROE ALLEN (1960), *Instructor in English*
 B.A., 1957, Southwestern at Memphis; M.A., 1958, University of Alabama.
- CHARLES HENRY ALLGOOD (1955), *Professor of Art*
 B.F.A., 1950, M.F.A., 1951, University of Georgia.
- RUTH BRITTON ALMY (1958), *Instructor in Geography*
 B.S., 1956, M.A., 1957, Memphis State University.
- HOLGER WITMER ANDERSEN (1949), *Associate Professor of Psychology*
 B.A., 1926, Nebraska State Teachers College; M.A., 1930, University of Wyoming; Ph.D., 1937, George Peabody College.
- SAM ARMSTEAD ANDERSON (1946), *Associate Professor of Mathematics*
 B.A., 1929, Southwestern at Memphis; M.A., 1932, George Peabody College.
- BARBARA L. ANTONELLI (1963), *Instructor in Physical Education*
 B.A., 1960, Webster College; M.A., 1963, Washington University.
- HARRY AUSPRICH (1963), *Professor of Speech and Drama*
 B.S., 1954, New York State University, College at Buffalo; M.S., 1956, University of Wisconsin; Ph.D., 1963, Michigan State University.
- CLYDE LOWELL BALL (1964), *Professor of Law*
 B.S., 1936, Memphis State University; M.A., 1937; LL.B., 1949, Vanderbilt University.
- HAROLD RAMSEY BANCROFT (1962), *Assistant Professor of Biology*
 B.S., 1958, M.S., 1959, Ph.D., 1962, Mississippi State University.
- PETER BANNON (1947), *Professor of English*
 B.A., 1936, M.A., 1937, Ph.D., 1943, State University of Iowa.

MELVIN C. BARBER (1959), *Instructor in Geography*

B.S., 1958, Memphis State University; M.A., 1959, George Peabody College.

WILLIAM B. BARTON, JR. (1958), *Professor of Philosophy*

B.A., 1944, Abilene Christian College; S.T.B., 1947, S.T.M., 1948, Ph.D., 1955, Harvard University.

EUGENE BENCE (1949), *Professor of Speech and Drama*

B.S., 1933, Memphis State University; M.A., 1949, Northwestern University.

AKI K. BERFIELD (1964), *Instructor in Management*

B.Hum., 1945; L.L.M., 1951, University of Mexico; M.B.A., 1964, Memphis State University.

*WILLIAM FRANK BETHANY (1957), *Assistant Professor of Mathematics*

B.S., 1957, Memphis State University; M.S., 1958, University of Mississippi.

NANCY JANE BILLETT (1963), *Instructor in Secretarial Science*

B.B.A., 1962, M.A., 1963, Memphis State University.

HARVEY DELANO BLACK (1964), *Instructor in Biology*

B.A., 1959, Hendrix College; M.S., 1965, University of Arkansas.

JAMES RICHARD BLEVINS (1963), *Instructor in English*

B.A., 1956, David Lipscomb College; M.A., 1960, George Peabody College.

AARON M. BOOM (1949), *Professor of History*

B.A., 1940, M.A., 1941, University of Nebraska; Ph.D., 1948, University of Chicago.

JERRY NEAL BOONE (1962), *Associate Professor of Psychology*

B.A., 1949, University of Mississippi; M.A., 1951, University of Florida; Ph.D., 1961, Vanderbilt University.

ROBERT CLARENCE BORRESEN (1963), *Assistant Professor of Psychology*

B.S., 1954, Northwestern University; M.A., 1959, University of Missouri.

MARY VIRGINIA BOWMAN (1963), *Assistant Professor of English*

B.A., 1940, Mount Holyoke College; M.A., 1951, Ph.D., 1960, University of Virginia.

DONALD A. BOYD (1957), *Assistant Professor of Management*

B.S., 1956, Delta State College; M.B.A., 1957, Indiana University.

FRANKLIN OAKES BRANTLEY (1964), *Assistant Professor of Spanish*

B.A., 1950, University of North Carolina; M.A., 1962, Tulane University.

*On leave of absence, 1964-1965

GERALD E. BREGER (1963), *Associate Professor of Management*
B.S., 1952, University of Florida; M.A., 1956, University of Miami;
Ph.D., 1964, University of Arkansas.

WILLIAM B. BREWER (1961), *Assistant Professor of Spanish*
B.A., 1958, Memphis State University; M.A., 1959, Tulane University.

WILLIAM EDWARD BRIGMAN (1963), *Assistant Professor of Political Science*
B.A., 1958, University of North Carolina.

WILLIAM A. BROTHERTON (1948), *Associate Professor of Industrial Technology*
B.S., 1948, Memphis State University; M.A., 1951, George Peabody College, Ed.D., 1964, Colorado State College.

CARL DEE BROWN (1952), *Professor of Biology*
B.S., 1947, Oklahoma Baptist University; M.S., 1947, Louisiana State University; Ph.D., 1951, Iowa State University.

JAMES ALLISON BROWN (1962), *Instructor in Health and Physical Education*
B.S., 1955, Memphis State University.

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M. GORDON BROWN (1963), *Associate Professor of Spanish*
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LEON WOODROW BROWNLEE (1952), *Professor of Education*
B.S., 1939, Sul Ross State College; M.Ed., 1947, Ph.D., 1952, University of Texas.

LEONARD ALLEN BRYSON (1963), *Instructor in Physical Education*
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ERWIN CLYDE BUELL (1960), *Professor of Political Science*
B.S., 1941, North Texas State University; M.S., 1947, Ph.D., 1955, University of North Carolina.

ELSE ANNE BUNCH (1960), *Instructor in Physical Education*
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E. DEAN CALLOWAY (1964), *Assistant Professor of Chemistry*
B.S., 1948, Millsaps College; M.S., 1954, Ph.D., 1956, University of Alabama.

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B.A., 1963, University of Texas; M.A., 1964, Harvard University.

- THOMAS RAY CAPLINGER (1964), *Assistant Professor of Mathematics*
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- ANTHONY ROBERT CARIANI (1964), *Professor of Geology*
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- WILLIAM PIERCE CARSON (1947), *Professor of English*
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- LLOYD LEE CHAMBERS (1964), *Instructor in English*
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- MARJORIE CHAN (1963), *Instructor in Music*
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- FRANCES EVALYN CHANEY (1958), *Instructor in English*
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- DON PEARSON CLAYPOOL (1956), *Professor of Chemistry*
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- VADA ANN CLIFTON (1963), *Instructor in English*
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Mississippi.

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- MERLIN C. DAILEY (1960), *Associate Professor of Art*
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- LEO J. DAVIS (1939), *Associate Professor of Health and Physical
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- MARGARET MORRIS DAVIS (1963), *Instructor in English*
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Education*
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bama.
- GEORGE L. DOWD (1963), *Assistant Professor of Education*
B.S., 1947, Union University; M.A., 1949, M.Ed., 1952, Ed.D., 1956,
The University of Mississippi.
- NANCY ANN DURDEN (1964), *Instructor in Physical Education*
B.S., 1959, Woman's College of Georgia; M.S., 1962, University of
Tennessee.
- BETTY LILLIAN DUVAL (1963), *Instructor in Physical Education*
B.S., 1961, M.A., 1962, Memphis State University.
- PAUL B. EAHEART (1946), *Professor of Music*
B.S., 1937, Memphis State University; M.A., 1946, Northwestern Uni-
versity.

- JOHN BLANTON EDGAR, JR. (1960), *Instructor in Management*
B.S., 1940, U. S. Naval Academy; Vet. Cert., 1947, Harvard School of Business Administration; M.A., 1961, Memphis State University.
- O. DEAN EHLERS (1956), *Assistant Professor of Health and Physical Education*
B.S., 1951, Central College; M.Ed., 1955, University of Missouri.
- VIRGINIA ANGELINE ELEAZER (1961), *Instructor in Biology*
B.S.E., 1940, M.S., 1943, University of Tennessee.
- NORMA HELEN ELLIS (1963), *Instructor in Physical Education*
B.A., 1963, Lambuth College.
- MAXWELL EMERSON (1960), *Instructor in Management*
B.S.C., 1957, Roosevelt University; M.A., 1961, Memphis State University.
- *JOE REX ENOCH (1962), *Assistant Professor of Sociology*
B.S., 1959, Union University; M.A., 1960, University of Arkansas.
- HELEN O. ENSLEY (1963), *Instructor in English*
B.A., 1961, Memphis State University; M.A., 1962, University of Tennessee.
- BRODIE TRAVIS ESTES (1951), *Assistant Professor of Chemistry*
B.S., 1947, M.A., 1956, Memphis State University.
- JOHN Y. EUBANKS, JR. (1961), *Instructor in Education*
B.S., 1954, M.A., 1960, Memphis State University.
- HENRY B. EVANS (1942), *Professor of English*
B.S., 1923, M.A., 1928, Ph.D., 1938, George Peabody College.
- JOHN EDWARD FARRIOR (1948), *Professor of English*
B.A., 1939, M.A., 1944, Ph.D., 1954, University of North Carolina.
- VICTOR FEISAL (1959), *Assistant Professor of Biology*
B.S., 1958, Memphis State University; M.S., 1960, University of Houston.
- *THOMAS C. FERGUSON (1960), *Assistant Professor of Music*
B.M.E., 1954, Murray State College; M.M., 1956, Eastman School of Music, University of Rochester.
- WAYNE B. FISHER (1963), *Assistant Professor of Education*
B.S., 1952, M.S., 1957, University of Tennessee.
- JAMES ROY FITZPATRICK (1954), *Assistant Professor of Accountancy*
B.S., 1948, Tennessee Polytechnic Institute; M.S., 1951, University of Kentucky.
- LORETTA DYER FLOYD (1952), *Assistant Professor of Health and Physical Education*
B.S., 1946, Alabama State College for Women; M.A., 1947, New York University.

*On leave of absence, 1964-65

DEWEY BRAY FOLDEN, JR. (1949), *Associate Professor of Biology*
B.S., 1947, B.A., 1948, Morris Harvey College; M.S., 1949, West Virginia University.

MELVIN V. FOSTER (1962), *Instructor in Mathematics*
B.S., 1956, Southern State College; M.S., 1963 University of Arkansas.

EUGENE HENRY FOX (1959), *Professor of Management*
B.S., 1956, Northern States College; Ph.D., (1962), University of Alabama.

JESSE WELLS FOX (1947), *Professor of Chemistry*
B.S., 1931, M.A., 1937, George Peabody College.

MAUDE GREENE FOX (1947), *Instructor in English*
B.S., 1937, M.A., 1940, George Peabody College.

BESS HENDERSON FREEMAN (1927), *Associate Professor of Home Economics*
B.S., 1921, George Peabody College; M.A., 1927, Columbia University.

ROGER W. FRENCH (1956), *Assistant Professor of Health and Physical Education*
B.S., 1956, University of Minnesota; M.A., 1959, Memphis State University.

GEORGE ALBERT FROCK (1963), *Instructor in Music*
B.S.M.E., 1960, University of Illinois; M.M.E., 1963, University of Kansas.

HOWARD EDWARD FRYE (1955), *Assistant Professor of Geography*
B.S., 1951, Eastern Michigan University; M.A., 1954, University of Michigan.

WALTER CURRIE FURR, JR. (1963), *Instructor in English*
B.S.E., 1938, Delta State College; M.A., 1947, George Peabody College.

NORRIS R. GABRIEL (1964), *Instructor in Industrial Technology*
B.S., 1951, Clemson College.

WILLIAM WALTON GARRETT (1963), *Associate Professor of Law*
B.S., 1949, University of Alabama; LL.B., 1954, Birmingham School of Law; LL.B., 1963, Cumberland School of Law; LL.M., 1963, Yale University.

*JOSEPH M. GARZA (1961), *Instructor in Sociology*
B.A., 1959, Southeastern Louisiana College; M.S., 1961, Florida State University.

WILLIAM LARRY GENTRY (1963), *Instructor in English*
B.A., 1961, David Lipscomb College; M.A., 1963, Vanderbilt University.

YVONNE LOUISE GIEM (1964), *Instructor in English*
B.A., 1961, Memphis State University; M.A., 1964, University of Arkansas.

*On leave of absence, 1964-65

- WILLIAM R. GILLASPIE (1961), *Associate Professor of History*
B.A., 1952, Westminster College; M.A., 1954, University of Missouri;
Ph.D., 1961, University of Florida.
- JOHN RAMSEY GORDON (1947), *Professor of Sociology*
B.A., 1929, M.A., 1932, Baylor University; Ph.D., 1951, University of
Texas.
- FRANK H. GOVAN (1956), *Professor of Art*
B.A., 1938, Hendrix College; M.A., 1951, Columbia University.
- PEGGY WATSON GOVAN (1961), *Instructor in Art*
B.S.E., 1956, Arkansas State Teachers College; M.A., 1961, Memphis
State University.
- FRANK MARLIN GRIMES (1961), *Instructor in English*
B.A., 1958, M.A., 1961, University of Mississippi.
- EDWARD VINCENT HACKETT (1962), *Assistant Professor of Psy-
chology*
B.S., 1952, M.S., 1954, St. Louis University.
- THOMAS NEAL HAGOOD (1963), *Instructor in English*
B.A., 1954, Jacksonville State College; M.A., 1960, Birmingham-South-
ern College.
- IVAN LAMOIN HALL (1963), *Assistant Professor of Accountancy*
B.S., 1956, Arkansas State Teachers College; M.B.A., 1958, University
of Arkansas.
- GRACE DANFORTH HAMPTON (1964), *Instructor in English*
B.S., 1925, University of Illinois; M.A., 1930, University of Illinois.
- NORMAN ELIJAH HANKINS (1964), *Assistant Professor of Education*
B.A., 1958, Tusculum College; M.A., 1962, East Tennessee State Uni-
versity; Ed.D., 1964, University of Tennessee.
- ROBERT RIGBY HARE (1964), *Assistant Professor of English*
B.A., 1936, Ohio State University; M.A., 1957, University of Delaware.
- GEORGE JONES HARRIS (1947), *Professor of Music*
B.A., 1936, Greenville College; M.M., 1947, Northwestern University.
- ZAFRUL M. HASAN (1964), *Assistant Professor of Sociology*
B.A., 1951, Panjab University; M.A., 1959, Louisiana State University.
- RALPH L. HATLEY (1947), *Professor of Health and Physical Edu-
cation*
B.S., 1936, M.S., 1950, University of Tennessee.
- GABE C. HAWKINS (1962), *Assistant Professor of Industrial Tech-
nology*
B.S., 1940, Mississippi State College; B.S., 1949, U.S.A.F. Institute of
Technology; M.A., 1962, Memphis State University.
- HERSCHEL MOORE HAYES (1952), *Associate Professor of Chemistry*
B.S., 1949, Middle Tennessee State College; M.A., 1950, George Pea-
body College.

- ALBERT FORD HAYNES, JR.** (1954), *Professor of Education*
 B.S., 1941, M.A., 1954, Memphis State University; Ed.D., 1958, University of Tennessee.
- VELMA BROOKS HEATHERLY** (1932), *Professor of French*
 B.S., 1928, M.A., 1932, George Peabody College.
- MYLO L. HEEN** (1961), *Instructor in Mathematics*
 B.S., 1938, University of North Dakota; M.S., 1961, Purdue University.
- JAMES BENJAMIN HEMBY** (1964), *Instructor in English*
 A.B., 1955, Atlantic Christian College; B.D., 1958, Vanderbilt University; M.A., 1964, Texas Christian University.
- CHARLES S. HENDERSON** (1963), *Assistant Professor of Sociology*
 B.A., 1952, Vanderbilt University; M.A., 1953, George Peabody College.
- EMMA CLAIRE HENRY** (1955), *Instructor in Education*
 B.S., 1952, M.A., 1953, Memphis State University.
- HERBERT ALLEN HERMANN** (1957), *Assistant Professor of Music*
 B.Mus., 1951, M.Mus., 1953, D.Mus., 1962, Indiana University.
- ***FLOYD RUBIN HERZOG** (1961), *Instructor in Speech and Drama*
 B.S., 1959, Memphis State University; M.S., 1962, Purdue University.
- JOHN R. HIRSCHMANN** (1955), *Assistant Professor of Industrial Technology*
 B.S., 1953, Memphis State University; M.A., 1958, George Peabody College.
- B. JAMES HOGGATT** (1962), *Instructor in Physical Education*
 B.S., 1953, M.A., 1962, Memphis State University.
- WILLIAM SLATER HOLLIS** (1961), *Assistant Professor of Economics and Finance*
 B.S.B.A., 1952, LL.B., 1958, University of Arkansas; M.A., 1962, Memphis State University.
- ELMORE HOLMES** (1947), *Professor of Chemistry*
 B.S., 1922, Princeton University; M.A., 1926, Columbia University; Ph.D., 1947, University of Tennessee.
- RAY SMALLEY HOUSE** (1963), *Associate Professor of Marketing*
 B.S., 1950, Union University; M.B.A., 1962, University of Mississippi.
- MARTIN RAY HOUSTON** (1964), *Instructor in Biology*
 B.S., 1961, M.A., 1963, Memphis State University.
- ELMO H. HOWELL** (1957), *Associate Professor of English*
 B.A., 1940, University of Mississippi; M.A., 1948, Ph.D., 1955, University of Florida.
- GOLDEN LEON HOWELL** (1961), *Associate Professor of Biology*
 B.S., 1950, M.S., 1954, Ph.D., 1959, University of Alabama.

*On leave of absence, 1964-65

ROSEMARY HUFF (1963), Instructor in English

B.A., 1954, Louisiana Polytechnic Institute; M.A., 1963, Louisiana State University.

CHARLES E. HUFFMAN (1963), Captain, United States Air Force;

Assistant Professor of Aerospace Studies

B.S., 1954, East Carolina College.

MELVIN A. HUMPHREYS (1962), Instructor in Health and Physical Education

B.S., 1959, B.S., 1961, University of Tennessee; M.A., 1962, Memphis State University.

CHARLES CARROLL IJAMS (1947), Professor of Physics

B.A., 1936, Union University; M.S., 1937, Ph.D., 1941, Vanderbilt University.

FLORENCE V. ILLING, R.N. (1951), Assistant Professor of Health and Physical Education and Director of Health Services

G.N., 1936, Medical College of South Carolina; B.S., 1950, George Peabody College; M.A., 1953, Memphis State University.

WILLIAM ROBERT INGRAM (1957), Assistant Professor of Marketing

B.S., 1956, Arkansas Polytechnic College; M.B.A., 1957, University of Akransas.

HAROLD ISAACS (1962), Instructor in History

B.S., 1958, M.A., 1960, University of Alabama.

GENE G. JAMES (1964), Assistant Professor of Philosophy

B.A., 1959, Wake Forest College.

PAT VERNEL JAMES (1963), Instructor in English

B.A., 1958, Southern State College; M.A., 1960, University of Arkansas.

JAKE JENKINS (1963), Major, United States Air Force: Assistant Professor of Aerospace Studies

B.S., 1949, University of Arkansas.

RIENZI WILSON JENNINGS (1951), Professor of Secretarial Science and Office Management

B.S., 1927, State University of Iowa; M.A., 1928, Ph.D., 1949, University of Kentucky.

DANA DOANE JOHNSON (1954), Professor of Art

B.A., 1937, Dartmouth; M.Ed., 1947, Ed.D., 1954, Boston University.

GLENN ALBERT JOHNSON (1956), Assistant Professor of Health and Physical Education

B.A., 1924, Huntington College; M.A., 1930, Columbia University.

SAM HOWARD JOHNSON (1949), Professor of Education; Dean of The School of Education

B.S., 1931, Memphis State University; M.A., 1939, Columbia University; Ed.D., 1954, New York University.

VIRGINIA LEE JOHNSON (1940), *Associate Professor of Secretarial Science and Office Management*

B.S., 1930, Memphis State University; M.S., 1944, University of Tennessee.

WILL JOHNSTON, JR. (1964), *Instructor in Management*

B.A., 1955, Southwestern at Memphis; M.B.A., 1964, Memphis State University, C.P.C.U.

ELLIOTT ANNA JONES (1963), *Instructor in English*

B.A., 1960, Millsaps College; M.A., 1962, University of Arkansas.

ELLIS M. JONES, JR. (1961), *Lieutenant Colonel, United States Air Force; Professor of Aerospace Studies*

B.S., 1958, Syracuse University; M.A., 1963, Memphis State University.

A. D. JOSEPH, JR. (1962), *Lieutenant Colonel, United States Air Force; Professor of Aerospace Studies*

B.S., 1954, M.Ed., 1955, M.A., 1957, Bowling Green State University.

HELEN H. KALTENBORN (1946), *Assistant Professor of Mathematics*

B.A., 1931, Barnard College; M.A., 1934, Columbia University; Ph.D., 1934, University of Michigan.

HOWARD S. KALTENBORN (1946), *Professor of Mathematics*

B.S., 1928, Carnegie Institute of Technology; M.S., 1931, Ph.D., 1934, University of Michigan.

ROBERT HARRELD KARRAKER (1961), *Assistant Professor of Chemistry*

B.A., 1953, Southern Illinois University; Ph.D., 1961, Iowa State University.

FREDERIC HARTWELL KELLOG (1964), *Professor of Engineering*

Geol.E., 1927, Colorado School of Mines; M.A., 1929, Ph.D., 1934, Johns Hopkins University.

CHARLES FRANCIS KEMPSTER (1964), *Instructor in Speech and Drama*

A.B., 1954, A.M., 1959, St. Louis University.

GLADYS MARIE KILMAN (1964), *Instructor in Physical Education*

B.S., 1964, Northwestern Louisiana State College.

FLORENCE PHYFER KRAUSE (1957), *Instructor in English*

B.A., 1951, M.A., 1953, University of Mississippi.

IRL BROWN KRAUSE (1957), *Associate Professor of Education*

B.A., 1944, Westminster College; M.A., 1949, Ed.D., 1954, University of Mississippi.

ABRAHAM DAVID KRIESEL (1964), *Assistant Professor of History*

B.A., 1958, Hunter College; M.A., 1960, Duke University.

ZELMA W. KUBIK (1963), *Instructor in English*

B.S., 1936, University of Missouri; M.A., 1961, Memphis State University.

EDWIN MURRAY LABOUNTY (1962), *Assistant Professor of Music*
A.B., 1948, Yankton College; B.M., 1951, M.M., 1952, Mus.D., 1962,
Indiana University.

EUGENE W. LAMBERT (1950), *Professor of Health and Physical Education*
B.S., 1930, University of Arkansas; M.Ed., 1935, University of Texas;
Ed.D., 1942, Columbia University.

SHIRLEY LEE LAND (1963), *Instructor in Psychology*
B.A., 1959, Coker College; M.A., 1961, Vanderbilt University.

FREDERIC O. LARRABEE (1954), *Professor of Management*
B.A., 1927, LL.B., 1930, State University of Iowa.

*HOMER A. LAWRENCE, JR. (1960), *Assistant Professor of Industrial Technology*
B.S., 1951, East Texas State College; M.Ed., 1956, North Texas State College.

FRANK CRAGG LEEMING (1963), *Assistant Professor of Psychology*
B.S., 1958, University of Illinois; M.A., 1961, Ph.D., 1963, University of Mississippi.

GEORGE B. LEON (1962), *Assistant Professor of History*
A.B., 1956, M.A., 1957, Ph.D., 1961, University of Georgia.

CHARLES E. LONG (1957), *Professor of German*
B.A., 1951, Henderson State Teachers College; M.A. (English), 1955;
M.A. (German), 1956; Ph.D., 1963, University of Arkansas.

*CHARLES JOSEPH LONG (1962), *Instructor in Psychology*
B.S., 1960, M.A., 1962, Memphis State University.

LEON DUPRÉ LONG (1964), *Assistant Professor of Journalism*
B.S., 1958, East Texas State College; M.A., 1961, University of Missouri.

PAUL RUSSELL LOWRY (1963), *Associate Professor of Management and Assistant Director, Bureau of Business Research*
B.S., 1941, M.B.A., 1959, Texas A. and M. University.

FREDERICK LUBRANI (1962), *Assistant Professor of Music*
B.S., 1939, University of Cincinnati; Diploma in Clarinet, 1939, Cincinnati Conservatory of Music; M.M., 1946, Cincinnati Conservatory of Music.

MICHAEL BURKE LUFPFER (1964), *Assistant Professor of Psychology*
B.A., 1959, Southwestern at Memphis; M.S., 1963, Ph.D., 1964, University of Miami.

HARRY RICHARD MAHOOD (1964), *Assistant Professor of Political Science*
B.A., 1951, M.A., 1952, University of Oklahoma; Ph.D., 1960, University of Illinois.

*On leave of absence, 1964-65

RAMONA MADSON MAHOOD (1964), *Instructor in Education*
B.S., 1955, Utah State University; M.S., 1959, University of Illinois.

STEPHEN D. MALIN (1964), *Assistant Professor of Speech and Drama*
B.A., 1957, Pennsylvania State University; M.A., 1962, University of Florida.

HERBERT JOHN MARKLE (1951), *Professor of Economics and Finance; Dean of The School of Business Administration*
B.B.A., 1932, University of Minnesota; M.A., 1949, Ph.D., 1951, State University of Iowa.

IRMA GREER MARKS (1944), *Assistant Professor of Chemistry*
B.S., 1944, Memphis State University; M.S., 1950, University of Arkansas.

ROBERT HERMAN MARSHALL (1960), *Associate Professor of Chemistry*
B.S., 1947, M.S., 1950, Illinois State Normal University; Ph.D., 1954, University of Illinois.

CHARLES FREDERICK MARTIN (1963), *Assistant Professor of Economics*
B.A., 1950, Wayne State University; M.A., 1957, University of Mississippi.

MARTHA ANNA MARTIN (1963), *Instructor in English*
B.A., 1962, M.A., 1963, University of Arkansas.

JAMES S. MATTHEWS (1949), *Professor of Geography*
B.S., 1936, M.A., 1941, Kent State University; Ph.D., 1949, University of Chicago.

JOHN H. MAYFIELD (1963), *Instructor in English*
B.A., 1961, Murray State College; M.A., 1963, University of Kentucky.

JAMES EUGENE McALPIN (1961), *Instructor in Industrial Technology*
B.S., 1957, Memphis State University; M.A., 1959, George Peabody College.

ELNA BROWNING McBRIDE (1946), *Associate Professor of Mathematics*
B.S., 1930, M.S., 1931, University of Tennessee.

JAMES RAYMOND McCANN (1955), *Professor of Psychology*
B.A., 1950, Washington University; M.A., 1952, University of Kansas City; Ph.D., 1955, Vanderbilt University.

JOE ALBERT McEACHERN (1962), *Instructor in Mathematics*
B.S., 1931, University of Tennessee; M.S., 1961, The George Washington University.

ROBERT W. McGOWAN (1949), *Associate Professor of Biology*
B.A., 1946, Lambuth College; M.A., 1947, George Peabody College.

WAYNE McLAURIN (1950), *Assistant Professor of English*
B.S., 1948, Memphis State University; M.A., 1951, Duke University.

*JOHN ANDERSON McLEMORE (1956), *Assistant Professor of English*
B.S., 1956, M.A., 1957, Memphis State University.

EDWARD PERRY McMAHON (1962), *Assistant Professor of Management*
B.S., 1945, U.S. Coast Guard Academy; B.S., 1949, M.S., 1958, University of Tennessee.

ROBERT DEE McMILLAN (1963), *Instructor in Mathematics*
A.A., 1959, Oklahoma Christian College; B.A., 1961, Abilene Christian College; M.S., 1963, Oklahoma State University.

CHARLES HARRISON McNUTT (1964), *Associate Professor of Anthropology*
B.S., 1950, University of the South; M.A., 1954, University of New Mexico; Ph.D., 1960, University of Michigan.

HARRY EUGENE MINETREE (1964), *Assistant Professor of English*
B.A., 1959, Vanderbilt University; M.F.A., 1962, University of Iowa.

ENOCH L. MITCHELL (1939), *Professor of History*
B.S., 1929, Memphis State University; M.A., 1938, George Peabody College.

KELL FREEMAN MITCHELL, JR. (1963), *Assistant Professor of History*
B.A., 1957, M.A., 1960, University of Georgia.

ROBESON S. MOISE (1963), *Captain, United States Air Force; Assistant Professor of Aerospace Studies*
B.A., 1953, University of the South.

JAMES ALEXANDER MONTGOMERY (1962), *Instructor in Biology*
B.S., 1960, M.A., 1962, Memphis State University.

JOE ARTHUR MOORE (1963), *Associate Professor of Law*
B.A., 1948, Oklahoma State University; LL.B., 1949, University of Oklahoma; LL.M., 1963, Southern Methodist University.

NELLE ELIZABETH MOORE (1956), *Assistant Professor of Education*
B.A., 1930, Lambuth College; M.A., 1946, Duke University.

FRANK MORGAN (1958), *Instructor in English*
B.A., 1954, Mississippi College; M.A., 1957, University of Mississippi.

JEAN ANTOINE MORRISON (1964), *Assistant Professor of German*
B.A., 1959, Millsaps College; M.A., 1960, University of Mississippi; Ph.D., 1963, Tulane University.

*On leave of absence, 1964-65

WILLIAM MACK MORROW (1961), *Assistant Professor of Political Science*

B.S., 1949, School of Foreign Service, Georgetown University; M.A., 1951, Vanderbilt University.

EDWARD NEWTON MOSLEY (1962), *Instructor in Mathematics*

B.A., 1960, Arkansas College; M.S., 1962, University of Arkansas.

ROLAND THOMAS MULLINS (1960), *Professor of Economics and Finance*

B.S., 1956, Arkansas State College; M.B.A., 1957, Ph.D., 1961, University of Arkansas.

BILLY J. MURPHY (1947), *Instructor in Health and Physical Education*

B.S., 1946, Mississippi State University.

JAMES E. MUSKELLEY (1964), *Assistant Professor of Spanish*

B.A., 1949, M.A., 1950, University of Mississippi.

JOHN MILLEDGE NAIL (1962), *Instructor in English*

B.A., 1955, Southwestern at Memphis; M.A., 1961, Tulane University.

CHARLES H. NASH (1961), *Instructor in Anthropology; Director of Chucalissa Museum*

B.A., 1932, Beloit College.

DELBERT P. NAVÉ (1950), *Assistant Professor of Art*

B.Ed., 1934, Eastern Illinois University; M.A., 1939, Ohio State University.

WALTER LOUIS NELMS (1964), *Assistant Professor of Education*

B.A., 1954, M.A., 1959, Harding College; Ed.D., 1964, University of Mississippi.

EMIL CHARLES NEMITZ (1954), *Assistant Professor of Chemistry*

B.S., 1922, University of Illinois; M.A., 1955, Memphis State University.

ROLLO K. NEWSOM (1964), *Instructor in Sociology*

B.S., 1963, University of Texas; M.S., 1964, North Texas State University.

CHARLES HOWARD NEWTON (1963), *Professor of Sociology*

B.A., 1956, M.A., 1958, University of Nebraska Ph.D., 1962, Florida State University.

ELBERT F. NOTHERN (1958), *Professor of Education*

B.S.E., 1947, University of Arkansas; Ed.M., 1949, Harvard University; Ed.D., 1953, University of Arkansas.

ROBERT LEE OGLE (1955), *Assistant Professor of Industrial Technology*

B.S. 1953, M.S., 1956, Ed.D., 1963, University of Tennessee.

LEWIS B. O'KELLY (1962), *Assistant Professor of Physics*

B.S., 1957, Memphis State University; M.S., 1960, Vanderbilt University.

MARCUS W. ORR (1959), *Associate Professor of History*

B.A., 1952, Southwestern at Memphis; M.A., 1956, Ph. D., 1958, University of Illinois.

WILLIAM ROBERT OSBORNE (1955), *Associate Professor of English*

B.A., 1948, Ouachita College; M.A., 1949, Ph.D., 1955, George Peabody College.

BETTY HULL OWEN (1959), *Instructor in Health and Physical Education*

B.S., 1956, Memphis State University; M.P.E., 1960, Purdue University.

ROY LAYTON OWENS (1963), *Instructor in Art*

M.F.A., 1961, Los Angeles County Art Institute.

WILLIAM HOWARD PAGE (1962), *Instructor in English*

B.S., 1956, Middle Tennessee State College; M.A., 1957, George Peabody College.

GEORGE WILSON PARCHMAN (1951), *Associate Professor of Biology*

B.S., 1948, M.A., 1949, George Peabody College.

LEA GIBBS PARK (1954), *Assistant Professor of Speech and Drama*

B.S., 1956, M.A., 1957, Memphis State University.

SHERMAN WILLIAM PARRY (1962), *Instructor in Mathematics*

B.S., 1940, Union College; M.S., 1962, Purdue University.

JOHN WEST PATRICK (1962), *Instructor in Health and Physical Education*

B.S., 1942, M.Ed., 1950, Mississippi State University.

HERMAN F. PATTERSON (1955), *Assistant Professor of Secretarial Science and Office Management*

B.S., 1949, Berea College; M.A., 1954, University of Kentucky.

BINFORD HARDY PEEPLES (1957), *Associate Professor of Secretarial Science and Office Management*

B.S., 1949, Mississippi State University; M.S., 1952, Florida State University; Ed.D., 1964, University of Kentucky.

CARROLL L. PELL (1961), *Associate Professor of French*

B.A., 1927, Mississippi College; M.A., 1933, George Peabody College; Ph.D., 1949, University of Wisconsin.

ELIZABETH CROW PHILLIPS (1953), *Associate Professor of English*

B.A., 1928, Maryville College; M.A., 1949, Ph.D., 1953, University of Tennessee.

GERALD SWETNAM PIERCE (1964), *Assistant Professor of History*

A.B., 1955, Harvard University; M.A., 1956, Ph.D., 1963, University of Mississippi.

JANIE G. POODRY (1963), *Instructor in Art*

B.S., 1946, M.A., 1948, Texas Woman's University.

MEREDITH POOLE (1955), *Assistant Professor of Mathematics*
B.A., 1950, M.A., 1955, University of Mississippi.

LARRY HOLMES POTTER (1952), *Assistant Professor of Mathematics*
B.A.E., 1943, M.A., 1949, University of Florida.

MINNIE MCRAE POWELL (1958), *Assistant Professor of Education*
B.S., 1942, Memphis State University; M.A., 1949, University of Tennessee.

ROBERT J. PRENDEVILLE (1959), *Assistant Professor of Speech and Drama*
B.A., 1942, University of New Mexico; M.A., 1946, Northwestern University.

BEN FRANCIS PREWITT (1959), *Instructor in Mathematics*
B.S., 1936, U. S. Naval Academy; M.S., 1959, Purdue University.

FRANKLIN SEARCY PRICE (1960), *Instructor in Health and Physical Education*
B.S., 1957, M.A., 1959, Memphis State University.

DOROTHY SPROLES PROVINE (1964), *Instructor in History*
B.A., 1959, Southern Methodist University; M.A., 1963, Louisiana State University.

ISABEL R. PULLEN (1961), *Instructor in French*
B.A., 1933, Mississippi State College for Women; M.A., 1957, University of Mississippi.

JIMMY REX PULLEY (1963), *Assistant Professor of Economics*
B.B.A., 1954, M.B.E., 1956, M.B.A., 1960, University of Mississippi.

PEGGY LAJUAN PULLIAM (1964), *Assistant Professor of Art*
B.S., 1961, Memphis State University; M.A., 1964, Indiana University.

NOEL GEORGE RAPP (1954), *Associate Professor of Speech and Drama*
B.A., 1941, Kent State University; Ph.D., 1955, Purdue University.

BASIL RATIU (1960), *Associate Professor of French*
A.A., 1947, A.B., 1947, University of Chicago; A.M., 1949, Indiana University; Ph. D., 1960, Columbia University.

MARGARET MYERS RAUHOF (1964), *Assistant Professor of Education*
A.B., 1935, Lynchburg College; M.A., 1951, Columbia University.

FLORA HAYES RAWLS (1930), *Professor of Education; Dean of Women*
B.A., 1925, M.A., 1930, Vanderbilt University; LL.D., 1964, Lambuth College.

HENRY L. REEVES (1953), *Assistant Professor of Mathematics*
B.S., 1947, University of Alabama; M.A., 1951, George Peabody College.

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B.A., 1957, Alabama College; M.A., 1959, University of Tennessee.

JOHN W. RICHARDSON (1959), *Professor of Education; Dean of The Graduate School*

B.S., 1931, Murray State College; M.Ed., 1939, Duke University; Ed.D., 1957, New York University.

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B.A., 1931, Murray State College.

JOSEPH HOWARD RIGGS (1955), *Associate Professor of Speech and Drama*

B.A., 1952, Alderson-Broaddus; M.A., 1953, West Virginia University; Ph.D., 1962, University of Illinois.

JOSEPH RAYMOND RILEY (1954), *Associate Professor of English*

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ELMA NEAL ROANE (1946), *Associate Professor of Health and Physical Education*

B.S., 1940, Memphis State University; M.S., 1943, University of Tennessee.

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RONALD EDWARD ROBERTS (1964), *Instructor in Sociology*

B.A., 1961, Drake University; M.A., 1964, Louisiana State University.

CHARLES NELSON ROBINSON (1961), *Associate Professor of Chemistry*

B.S., 1949, Maryville College; M.S., 1951, Ph.D., 1953, University of Tennessee.

CLAYTON R. ROBINSON (1961), *Instructor in English*

B.A., 1959, Trinity University; M.A., 1960, Mississippi Southern College

WILLIAM TARVER ROUNTREE, JR. (1963), *Associate Professor of Law*

A.B., 1949, University of Alabama; LL.B., 1952, Harvard University.

A. S. RUDOLPH (1945), *Professor of Biology*

B.S., 1924, Western Kentucky State Teachers College; M.S., 1929, University of Kentucky; Ph.D., 1938, Iowa State University.

HEBER ELIOT RUMBLE (1946), *Professor of Education; Director of The Summer Session*

B.S., 1924, Oakland City College; M.A., 1933, Ph.D., 1943, University of Illinois.

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B.A., 1949, Arkansas College.

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B.S., 1960, Memphis State University; M.A., 1962, Ohio University.

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B.A., 1947, M.A., 1948, Colorado State College of Education; H.S.D., 1953, P.E.D., 1954, Indiana University.

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B.A., 1959, Old Dominion College; M.A., 1961, University of Pennsylvania.

THOMAS PAGE SHARP (1959), *Assistant Professor of Management*
B.S., 1957, M.S., 1959, Mississippi State University.

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B.A., 1963, Loyola University of Los Angeles; M.A., 1964, San Fernando Valley State College.

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DARRELL D. SIMMONS (1950), *Associate Professor of Industrial Technology*
B.S., 1940, Arkansas State Teachers College; M.S., 1949, Oklahoma Agricultural and Mechanical College; Ed.D., 1958, University of Tennessee.

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B.S., 1955, M.A., 1961, Memphis State University.

- ROBERT JENNINGS SIMPSON (1964), *Instructor in Mathematics*
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- LOIS ARNOLD SINIARD (1964), *Instructor in Geography*
B.S., 1963, M.A., 1964, Memphis State University.
- PAUL HARDEMAN SISCO (1947), *Professor of Geography*
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- JOHANNES SMIT (1960), *Associate Professor of Music*
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- A. EUGENE SMITH (1960), *Instructor in Health and Physical Education*
B.S., 1949, Sterling College; M.S., 1954, Indiana University.
- OMAR EWING SMITH (1961), *Associate Professor of Biology*
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- WALTER RHEA SMITH (1951), *Professor of English; Dean of The School of Arts and Sciences*
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- ROBERT VICTOR SMYTHE (1963), *Instructor in Spanish*
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B.S., 1942, Massachusetts State Teachers College; M.A., 1949, Clark University; Ph.D., 1961, University of Michigan.
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- ELIZABETH SUPPLEE SPENCER (1956), *Assistant Professor of Journalism*
B.A., 1937, Cornell University; B.J., 1940, M.A., 1941, University of Missouri.
- JESSE WATSON SPICELAND (1949), *Professor of Accountancy*
B.S., 1947, Southern Illinois University; M.S.B.A., 1948, Washington University; C.P.A., 1951, Tennessee.

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B.S.C.E., 1951, M.S., 1956, University of Mississippi; Ph.D., 1963, University of Illinois.

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versity of Oklahoma.

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Librarian, The School of Law
B.A., 1953, Oklahoma City University; LL.B., 1934, Southern Methodist
University; M.S., 1962, Kansas State Teachers College.

PAUL L. WERTZ, JR. (1962), *Major, United States Air Force; As-
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B.S., 1947, Northwestern University; M.A., 1964, Memphis State Uni-
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DAVID A. WEST (1963), *Professor of Economics and Finance*
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GEORGE ALLEN WESTLAND (1957), *Assistant Professor of Journalism*
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B.S., 1929, Memphis State University; M.S., 1941, University of Ten-
nessee.

BRADFORD WHITE (1948), *Professor of Speech and Drama*
B.A., 1934, University of North Carolina; M.F.A., 1939, Yale University.

- GERRY C. WHITE** (1963), *Instructor in Industrial Technology*
B.S.-E.E., 1960, Christian Brothers College; M.S.-E.E., 1963, University of Tennessee.
- LONNIE J. WHITE** (1961), *Associate Professor of History*
B.A., 1950, West Texas State College; M.A., 1955, Texas Technological College; Ph.D., 1961, University of Texas.
- WALTER E. WILHELM** (1964), *Assistant Professor of Biology*
A.B., 1955, Harris Teachers College; M.S., 1959, University of Illinois; Ph.D., 1964, Southern Illinois University.
- HERBERT LEE WILLIAMS** (1956), *Professor of Journalism*
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- WILLIAM ROBERT WILLIAMS** (1961), *Instructor in English*
B.A., 1957, Lambuth College; M.A., 1961, Memphis State University.
- MAJOR LOYCE WILSON** (1964), *Assistant Professor of History*
B.A., 1950, Vanderbilt University; M.A., 1953, University of Arkansas; Ph.D., 1964, University of Kansas.
- RONALD PAUL WILSON** (1964), *Instructor in Mathematics*
B.S., 1960, Memphis State University.
- JOHN ALLEN WINFREY** (1958), *Instructor in Mathematics*
B.S., 1926, U.S. Naval Academy; M.S., 1958, Memphis State University.
- BYRON HOOPER WISE** (1964), *Assistant Professor of Biology*
B.S., 1950, M.S., 1953, Ph.D., 1962, University of Florida.
- RUTH G. WOODBURY** (1953), *Instructor in History*
B.A., 1940, M.A., 1947, University of Mississippi.
- JAMES DUDLEY WOOLF** (1959), *Associate Professor of English*
B.A., 1942, The College of the Ozarks; M.A., 1949, University of Michigan; Ph.D., 1953, Vanderbilt University.
- ALBERT HAINES WOOLLETT** (1963), *Assistant Professor of Physics*
B.A., 1949, M.S., 1950, University of Mississippi; Ph.D., 1956, University of Oklahoma.
- MILTON LEROY WRAY** (1957), *Assistant Professor of Accountancy*
B.A., 1951, Southwestern at Memphis; M.B.A., 1954, Wharton School of Finance and Commerce, University of Pennsylvania; LL.B., 1960, Southern Law University; C.P.A., 1956, Tennessee.
- TZE SUN WU** (1964), *Professor of Engineering*
B.S., 1941, National Chiao-Tung University; M.S., 1949, University of Washington; Ph.D., 1952, University of Illinois.
- LAWRENCE WYNN** (1950), *Professor of English*
B.A., 1936, Emory University; M.A., 1940, Duke University; M.A., 1947, Ph.D., 1951, Princeton University.
- DAVID YELLIN** (1964), *Assistant Professor of Speech and Drama*
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- LEE STRICKLEN YOUNG** (1962), *Instructor in English*
B.A., 1952, Southern State College; M.A., 1956, University of Arkansas.

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PROFESSORS NEWTON and ROANE; ASSISTANT PROFESSOR HACKETT.

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SCHOLARSHIPS AND LOANS: MR. EUBANK; DEAN RAWLS, DEAN McDANIEL; PROFESSOR THOMPSON; ASSOCIATE PROFESSOR MATTHEWS; MR. BANNISTER.

STUDENT ACTIVITIES: DEAN RAWLS; MR. NEWPORT; PROFESSOR JENNINGS; ASSISTANT PROFESSOR PARK; MR. HUMPHREYS; presidents of the freshman, sophomore, junior, and senior classes.

STUDENT ACTIVITIES CONTROL BOARD: DEAN RAWLS, DEAN ROBISON; MR. COLLINS; ASSISTANT PROFESSOR SAWYER; president of the Student Government Association; president of the Inter-Fraternity Council; president of the Panhellenic Council; chief justice of the Supreme Court; and one independent student.

STUDENT ELECTIONS: DEAN ROBISON, DEAN RAWLS; MR. COLLINS.

STUDENT PUBLICATIONS: ASSISTANT PROFESSOR SPENCER; DEAN COX; MR. NEWPORT; PROFESSOR SCHIRMER; ASSISTANT PROFESSOR TREECE; president of the Student Government Association; editor of *The Tiger Rag*.

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THE UNIVERSITY CAMPUS SCHOOL

GRADY G. WOODY (1958), *Principal*

B.S., 1951, Union University; M.S., 1958, Memphis State University.

MARY ELIZABETH ANDERSON (1951), *Supervising Teacher, Third Grade*

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SOPHIA CLARK BROTHERTON (1961), *Supervising Teacher, First Grade*

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RENA OPAL COLEMAN (1931), *Supervising Teacher, Third Grade*

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DOROTHY SIMMONS DAUGHERTY (1958), *Supervising Teacher, First Grade*

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SARAH LEE FOSTER (1955), *Supervising Teacher, Third Grade*

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ELBA GANDY (1946), *Supervising Teacher, Music*

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ROSE MARIE HICKMAN (1963), *Supervising Teacher, Fourth Grade*

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PATRICIA F. HORTON (1964), *Supervising Teacher, Second Grade*

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AVIS ALLEN PENTECOST (1963), *Supervising Teacher, First Grade*

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FRANCES HOLMES PETERS (1955), *Supervising Teacher, Sixth Grade*

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JOHN G. BANNISTER, B.S., M.A., *Director of Student Aid*

ERNEST GRADY BOGUE, B.S., M.A., *Director of Records*

WILLIAM A. BROTHERTON, B.S., M.A., Ed.D., *Acting Director of The Evening Division*

DAVID ARTHUR COLLINS, B.A., M.A., *Assistant to The Dean of Students*

JOHN Y. EUBANK, B.S., M.A., *Director of Admissions*

CORNELL C. FAQUIN, JR., M.D., *University Physician*

VIRGINIA SIMS FOREMAN, *Director of Alumni Placement Service*

EDWARD V. HACKETT, B.S., M.S., *Director of The Testing and Guidance Center*

MARY EVANS HALE, *Director of Student Employment Office (Tennessee Department of Employment Security)*

HASKEL D. HARRISON, *Director of Personnel*

RAY L. HERZOG, *Superintendent of Buildings and Grounds*

FRANK HOLLOMAN, A.A., LL.B., *Director of Foundation and Development*

CHARLES HOLMES, B.S., *Director of Public Information*

ARTHUR GAGE HUDSON, M.D., *University Physician*

FLORENCE VIRGINIA ILLING, G.N., B.S., M.A., *Director of Health Services*

CHARLES JETTON, B.A., *Manager of the University Bookstore*

MARGAREE J. KNIGHT, B.A., *Assistant Dean of Women*

EUGENE W. LAMBERT, B.S.E., M.Ed., Ed.D., *Director of Athletics*

FRANK LAND, B.B.A., *Director of Alumni Affairs*

HAROLD LANE, *Accountant*

GILBERT MICHAEL, *University Photographer*

TODD M. MILLER, B.S., *Supervisor of Data Processing*

WALTER H. MURPHY, M.D., *University Physician*

CHARLES H. NASH, B.A., *Director of Chucalissa Indian Village and Museum*

MYRTLE PARKE RICHARDSON, B.A., *Director of Teacher Certification and Placement*

WALTER ROY RIDLEHUBER, B.S., *Assistant Business Manager*

MAURICE ROBERTS, B.S., *Director of Student Center*

R. EUGENE SMITH, B.S., *Auditor*

JAMES H. TAYLOR, B.B.A., M.B.A., *Assistant Business Manager*

GEORGE WINE, B.A., *Sports Information Director*

Part Two

DESCRIPTION OF THE UNIVERSITY

HISTORICAL STATEMENT

IN 1909 the General Assembly of the State of Tennessee enacted a General Education Bill which provided for the establishment and maintenance of normal schools for the training of teachers, one such school to be located in each of the three grand divisions of the state. In generous support of this proposal, Memphis and Shelby County contributed \$350,000 and a site of approximately eighty acres near the eastern edge of the city. On September 15, 1912, West Tennessee State Normal School was formally opened.

During the intervening years the name, nature, and functions of this school have undergone numerous changes. In 1925 it became a senior college, and the name was changed to West Tennessee State Teachers College. In 1941 the liberal arts curriculum was considerably enlarged, and the name was changed to Memphis State College. In 1950 a graduate school was added, and the under-graduate program was reorganized into three schools. On July 1, 1957, by action of the Tennessee State Legislature, the school was designated Memphis State University.

ORGANIZATION

Memphis State University comprises The School of Arts and Sciences, The School of Business Administration, The School of Education, The School of Law, The Division of Engineering and Applied Science, The Department of Industrial Technology, and The Graduate School.* The regular program of the University is supplemented by The Evening Division, The Downtown Division, The Summer Session, and The Extension Division, the various offerings of which afford greatly increased opportunities for the people of this area to avail themselves of the facilities and services of the University.

AIMS OF THE UNIVERSITY

Memphis State University has aimed in the past and continues in the present to offer an educational program compounded of those three elements traditionally associated with institutions of higher learning: teaching, research, and public service.

The primary purpose of the University is to provide experiences through which students may attain a high degree of intellectual maturity, social stability, and professional competence. Through the variety of courses offered by the various schools of the Univer-

*The Graduate School is not described in this catalog; requests for the Bulletin of The Graduate School should be addressed to the Dean of that school.

sity it is hoped that the student's perspective will be so enlarged that the choices he makes in life will be cogent ones and that he will become a fully awakened and involved individual.

Research in many areas and on all levels is vital if our knowledge and comprehension are to be expanded. Because of the unexpected and invaluable results which have come from research undertaken without any immediate goal in view, the distinctions between pure research and applied research have become blurred. From the universities, the communities of scholars, each seeking truth in his own way, have come the most significant discoveries of our age. Memphis State University is constantly seeking to increase and improve its facilities in order to make available to its faculty and students the time, tools, and atmosphere necessary for the kinds of research which the citizens of the area have every right to expect.

Teaching and research are in themselves, of course, part of the public service which the University offers; but, in addition to these, the faculty, staff, and students make other valuable contributions to the public good. Both the physical facilities and the talents of the personnel are now utilized in many ways, and the University is always receptive to suggestions as to how the services may be expanded in order to be of added value to the citizens of the metropolitan area, the state, and the surrounding region.

ACCREDITATION

Memphis State University is fully accredited by The Southern Association of Colleges and Secondary Schools, and is a member of The Association of American Colleges, The Tennessee College Association, The American Association of Colleges for Teacher Education, and the American Council on Education. The School of Education is accredited by the National Council for Accreditation of Teacher Education.

The honorary and professional societies maintaining chapters at the University are listed on page 75.

The American Association of University Women, of which the University is a corporate member, admits women graduates of Memphis State University to national membership.

GOVERNMENT

The government of Memphis State University is vested in the Tennessee State Board of Education; the Governor is an *ex officio* member of the board, and the Commissioner of Education is its

chairman. The other twelve members of the board are appointed by the Governor, four members from each of the three grand divisions of the State. Offices of the Board are located in the Cordell Hull Building, Nashville.

The chief administrative officer of the University is the President. He is assisted and advised by members of the administrative staff and the faculty organized into three official bodies, The Administrative Council, The Faculty Council, and The Graduate Council. Each school of the University is administered by a dean, each individual department by a chairman.

PHYSICAL FACILITIES

ACADEMIC BUILDINGS

The Administration Building, the first academic building on the campus, was completed in 1912; it has been enlarged and remodeled several times and is completely air conditioned. It houses most of the administrative offices of the University and contains classroom and office space for several departments in The School of Arts and Sciences. The Academic Computer Center is also located in this building.

Manning Hall, built in 1930 and named in honor of the University's first instructor in science, Priestly Hartwell Manning, provides the departments of Chemistry and Physics, and Home Economics with classrooms, offices, laboratories, a science auditorium, and faculty and graduate research facilities.

Johnson Hall, completed in 1958, is named in honor of Dr. Rayburn W. Johnson, Professor Emeritus of Geography, and his late wife, Ethel B. Johnson. Air conditioned throughout, it contains classrooms, laboratories, offices, a map library, a conference room, and an auditorium for the departments of Geography and Geology, and Psychology. The map library, a depository for the Army Map Service, Washington, D. C., contains over 10,000 maps. On the ground floor is the Ethel B. Johnson Reception Room, dedicated to the use of the Memphis State University Faculty Wives Club.

Jones Hall, named in honor of Otis Henry Jones, University bursar from 1925 to 1937, was completed in 1960 and enlarged in 1964. It is completely air conditioned and provides classroom and office space for the departments of Aerospace Studies, Art,

Classical Languages, and Modern Languages (with an electronic language laboratory). It also houses the University Post Office and the office of the coordinator of Veterans' Affairs.

The School of Business Administration Building is a new four-story, air-conditioned structure with an adjoining auditorium; it contains administrative offices, classrooms, laboratories, and offices for the departments of Accountancy, Economics and Finance, Political Science, Management, Marketing, Secretarial Science and Office Management, and the Bureau of Business Research.

The Industrial Technology Building, built in 1941, and enlarged in 1946, and 1960, provides classrooms, offices, and extensive laboratory facilities for drafting, surveying, woodworking, metal-working, ceramics, and general shop practices. The University Printing Plant is located in this building.

The Memphis State University Campus School, operated in cooperation with the Board of Education of the City of Memphis, provides air-conditioned facilities for training student teachers and opportunities for observing good teaching procedures. In addition to regular classrooms it features flexible spaces, learning cubicles, one-way observation glass, sound controls, connections for television broadcasts and reception, and modern facilities to meet the needs of modern public school teaching. These facilities are also utilized in faculty and graduate demonstration, research and experimental projects.

The Field House, built in 1951 and enlarged in 1958 and 1964, contains basketball courts, gymnasiums, classrooms, a stage, seats for 4000, and offices for the Department of Health and Physical Education and for athletics.

The Biological Sciences Building, completed in 1964, is an air-conditioned building containing classrooms, laboratories, specimen areas, research facilities, and an auditorium.

The School of Education Building, an air-conditioned structure also completed in 1964, houses the administration and faculty offices of The School of Education as well as general and special classrooms, laboratory and research areas (including a curriculum laboratory), and an auditotium. The offices of the State Board of Education, the University of Tennessee Graduate Program, and the graduate program in engineering are also located in this building.

The School of Law Annex, consisting of one wing of the former campus school, provides air-conditioned classrooms (including one arranged as a typical courtroom) and offices for The School of Law. An air-conditioned building which is immediately adjacent houses the law library and study facilities.

THE LIBRARY

The University Library, named in honor of former President John Willard Bristor, was built in 1927; it has since been considerably enlarged, the latest edition having been completed in 1963. The collection at present numbers over 200,000 volumes, including all U.S. Government publications since 1956. Subscriptions and files are maintained for general and specialized periodicals.

DORMITORIES AND OTHER HOUSING

There are four residence halls for women: *Mynders Hall*, *West Hall*, *Nellis Angel Smith Hall*, and *Rawls Hall*, a new six-story, air-conditioned dormitory.

There are five residence halls for men: *Hayden Hall*, *North Hall*, *East Hall*, *Robison Hall*, and *Scates Hall*.

Vets Village is a group of frame buildings containing 67 apartments; built after World War II to house veterans and their families, these units are now open to all married students, although veterans retain preference. Applications for occupancy should be made to the Dean of Men.

AUXILIARY BUILDINGS

The Old Gymnasium was in 1961 converted into studio and office space for WKNO-TV, the educational television station operated by the Memphis Community Television Foundation.

The Cafeteria, with a seating capacity of 500, adjoins *The Student Center*, which contains a soda fountain, two snack bars, and facilities for group meetings, games, and dancing. A faculty dining room is located in a wing of the former campus school building. All of these facilities are air-conditioned.

The Panhellenic Building, erected in 1959 and enlarged in 1963 by the national sororities with chapters on the campus, is an air-

conditioned facility which affords suites for ten sororities and a hostess, guest room, kitchen, and ballroom.

The University Auditorium, located in the air-conditioned Administration Building, seats 1200 and has a stage fully equipped for dramatic and musical productions.

The Bookstore provides air-conditioned, self-service shopping facilities for text-books, and school supplies and equipment.

CHUCALISSA INDIAN VILLAGE AND MUSEUM

Chucalissa, prehistoric Indian town and museum, situated in the southwest corner of Shelby County on Mitchell Road, is operated by the University as a research and training facility. Excavation of the site is being undertaken, with students performing the archaeological field work under staff supervision. Adjoining acreage serves as a biological field station. Chucalissa also provides indoor and outdoor archaeological exhibits, open to the public throughout the year.

Part Three

ADMISSION TO THE UNIVERSITY

ADMISSION TO THE UNIVERSITY

INQUIRIES about admission to any school of the University should be addressed to the Dean of Admissions. The admissions office receives and processes all applications, evaluates credentials, and issues cards of admission to qualified applicants. Students may enter at the beginning of either of the regular semesters or at the beginning of either of the two terms of The Summer Session.

ADMISSION OF FRESHMEN

An applicant for admission as a freshman may qualify under any one of six plans:

1. By a transcript of credits showing graduation from an approved or accredited high school based on the completion of a four-year course of study. Students who do not present one unit of American history are required by Tennessee law to enroll for the course upon initial enrollment.
2. By High School Equivalency Diploma. Veterans and non-veterans over 21 years of age may be admitted by the equivalency diploma, provided it is issued upon a minimum average GED test score of 50, with no single score below 35.
3. By General Education Development tests. Veterans who are not high school graduates and who have at least 12 months of service may be admitted conditionally by GED test scores averaging 45 or more, with no single score below 35.
4. By certificate and examination. An applicant from an unapproved high school who presents a satisfactory certificate will be required to take examinations only in subjects covering four units of high school work taken in the senior year.
5. By examination. An applicant who does not present a satisfactory certificate may be admitted by passing examinations on sixteen units required for graduation in an approved high school.
6. Young men and women who are 21 years of age and over, and who have not completed four years of high school work, may be admitted and permitted to take courses for which they are prepared, provided that they satisfy all entrance requirements before becoming degree candidates. Such students should, if possible, qualify for the high school equivalency diploma.

ADMISSION OF TRANSFER STUDENTS

Admission with advanced standing will be granted to a student who has honorable dismissal from an accredited institution and whose cumulative quality point average meets the following minimum standards, on a scale in which a grade of A gives 4 quality points:

- With two semesters in residence: a quality point average of 1.5000
- With four semesters in residence: a quality point average of 1.8000
- With six semesters in residence: a quality point average of 1.9000
- With more than six semesters in residence: a quality point average of 2.0000.

A transfer student who has failed his work at another institution and is not entitled to continue there will not be admitted to the University except under unusual circumstances. A transfer student failing to meet the above entrance requirements may be refused admission, or may be admitted on scholastic probation, or on any other condition that may seem advisable. A transfer student who meets these qualifications, but whose average for the last term in residence is less than 1.5000, will be entered on scholastic probation. The probation must be removed within the first semester of residence.

Credits will be accepted only for courses which are equivalent to those offered at Memphis State University toward a degree. The Dean of Admissions will evaluate the transcript of each transfer student to show the credits acceptable to the University. The dean of the school to which the student is admitted will inform the student the extent to which his credits will apply toward the degree sought.

All credits are transferred at their original grade; if the quality point average on such transferred credits is less than C, the cumulative quality point average must be brought up to a C by higher grades at Memphis State University before the student can qualify for graduation. (See page 81 for the method of computing quality point averages.) Every student must qualify for graduation on the basis of every course attempted, here and elsewhere. In no case may transferred grades be used to raise the student's quality point average on courses taken at Memphis State University; his average on all such courses must be C (2.0000).

A student submitting advanced standing credit from an unaccredited institution will be given consideration. Each case will be considered individually, and credit may be accepted tentatively. In no case will credit be recorded until it has been validated by satisfactory work at this university for one or more semesters.

Advanced standing of not more than 72 semester hours will be accepted from a junior college. Credit earned at a junior college after a student has completed 72 semester hours of college work from any source will not be accepted.

Transfer credit from vocational schools or vocational colleges not accredited by the Tennessee State Board of Education and/or The Southern Association of Colleges and Secondary Schools (or corresponding agencies for other states and regions of the United States) will not be accepted toward a degree or toward teacher certification.

A student who has attended any accredited or approved institution of higher learning will not be permitted to enroll as a beginning freshman.

PROCEDURES FOR ADMISSION*

1. *Application.* A written application on a form supplied by the University is required. The Application for Admission form, which includes instructions for completing arrangements for entrance, must be secured from the office of the Dean of Admissions, completed in ink or by typewriter, and returned to the admissions office.

2. *Application Fee.* Applicants for admission in the fall semester, 1965, and thereafter are required to submit with their application form a non-refundable fee of \$5.00.

3. *Credentials.* A student entering directly from high school should request his principal to mail to the Dean of Admissions an official transcript of his high school work. A student entering from another college or other colleges should request the registrar of each college attended to mail to the Dean of Admissions an official transcript of his college work. *In every case credentials must include a complete record of all previous secondary schools and all collegiate institutions attended, regardless of credit earned, and regardless of whether or not credit is desired.* To prevent delay in completing registration, all credentials, including the completed application form, the official transcript, and the health service record, should be on file in the office of the Dean of Admissions at Memphis State University before the beginning of the term for which application is made. All transcripts become the property of the University and cannot be returned.

4. *Age.* An applicant must be at least 16 years of age.

5. *Character.* The applicant must submit evidence of good moral character (usually the recommendation of the high school

*For admission of Adult-Special Students see page 59.

principal). All applicants must have honorable dismissal from the last high school or college attended.

6. *Entrance Examination.* All applicants for admission to Memphis State University must take an entrance examination. They may take either (1) the tests administered through the American College Testing Program or (2) the Scholastic Aptitude Test of the College Entrance Examination Board. Test scores should be sent to the office of the Dean of Admissions, Memphis State University. High school students are urged to take one of these examinations during the senior year. The ACT examination is administered in designated centers in November, February, April, and June. The SAT of the CEEB is given in designated centers in December, January, March, and May. For further information on date and location of centers, the applicant should confer with his counselor or his high school principal. Information about and application forms for these tests may also be obtained as follows: for the American College Testing Program—the ACT State Co-ordinator; and for the SAT of the College Entrance Examination Board—Educational Testing Service, P. O. Box 592, Princeton, New Jersey, or P. O. Box 27896, Los Angeles 27, California.

7. *Health Card.* Each student is required, as a condition of admission, to file with the Dean of Admissions a medical history and report of physical examination on the Health Service Record Card provided by the University. Each candidate must be free from communicable disease; must show evidence of vaccination for smallpox within the last five years; and must show a satisfactory chest x-ray or tuberculin skin test within the past six months. It is strongly recommended that all students be immunized against tetanus.

ADMISSION OF ADULT-SPECIAL STUDENTS

A student who desires to take only a limited number of courses and who indicates that he is not presently working toward a degree at Memphis State University, may be admitted as an *Adult-Special Student*, subject to the following provisions.

1. The applicant must hold a high school diploma or be 21 years of age or older.
2. He will be permitted to take no more than 9 semester hours per semester.
3. He will be allowed to enroll only in classes which meet after 4:00 p.m. or on Saturday.

4. He may not accumulate, in adult special status, more than 18 semester hours of credit at Memphis State University. (After that time he must apply for regular classification if he is to continue to enroll.)
5. He may at any time apply to the Dean of Admissions for reclassification as a regular student, effective at the beginning of the next regularly scheduled semester; he must follow the same procedures and meet the same standards as required for all other applicants for admission to the University. If he is admitted as a regular student, the credits which he earned as an adult-special student (up to a maximum of 18 semester hours) may be counted toward a baccalaureate degree if approved by the dean of the school from which the degree is sought.
6. A student who has been denied regular admission to Memphis State University because of low admission test scores may not apply for Adult-Special admission until at least 12 months after the previous application.
7. A student who has been dismissed, because of low academic standing, from another institution of higher learning may not apply for admission until at least 12 months after such dismissal.

FORMER STUDENTS

Former students who wish to return to the University must file a formal application for readmission; application forms, available from the office of the Dean of Admissions, must be completed in ink or by typewriter and returned to the Dean of Admissions. If the student has enrolled at another college since last attending Memphis State University, he must have a transcript from the other college submitted and approved before he may re-enter. Applications will receive favorable consideration only if the applicant is eligible for readmission under all University regulations, including the grade-point average requirements shown on page 57.

CREDIT FOR SERVICE IN THE ARMED FORCES

Veterans who have completed one year or more of full-time, extended active military service will be excused from taking the required physical education activity courses and, in addition, will be allowed six semester hours (less credit already earned) of health and physical education credit upon presentation of a copy of their discharge form (DD Form 214) to the office of the Dean of Admissions. Reservists who have served six months active duty under the provisions of the Reserve Forces Act of 1955 are not considered veterans; they may, however, be excused from taking the required physical education activity courses upon the presentation of a copy of their discharge form (DD Form 214) to the chairman of the Department of Health and Physical Education.

Part Four

GENERAL INFORMATION

FEES AND FINANCIAL REGULATIONS

(The following regulations apply to undergraduate students only; for tuition and fees for graduate students see the Bulletin of The Graduate School.)

Application Fee. Applicants for admission are required to submit with their application form a non-refundable fee of \$5.00.

Tuition. Tuition is free for students who are residents of Tennessee; non-resident students are charged \$82.50 per semester.

Registration Fee. A single composite registration fee of \$82.50 per semester is charged for all full-time students who are residents of Tennessee; non-residents are charged \$165.00 (including the tuition fee). This fee covers registration, student activities, and instructional charges.

Part-Time and Off-Campus Students: Fees for part-time students and for students enrolled in classes which meet off the campus are as follows:

Undergraduates, residents of Tennessee: \$7.50 per semester hour
 Undergraduates, non-residents of Tennessee: \$15.00 per semester hour

Graduates, residents of Tennessee: \$9.00 per semester hour

Graduates, non-residents of Tennessee: \$18.00 per semester hour

The Summer Session

Undergraduates, residents of Tennessee: \$7.50 per semester hour, or \$55.00 for the complete two-term session

Undergraduates, non-residents of Tennessee: \$15.00 per semester hour, or \$110.00 for the complete two-term session.

NOTE: The student must indicate his choice of payment plan at the time of his initial summer session registration. He may not shift from one plan to the other after his initial registration. The \$55.00 fee entitles him to register for a maximum of 14 semester hours in two terms. *No part of this fee is returnable* (unless the student withdraws within the period during which refunds are allowed); that is, if the student registers for less than the maximum number of hours, or if he attends for only one term, no part of the \$55.00 payment will be refunded. If he wishes to register for only one term or for less than 8 semester hours for two terms, it will, of course, be to his advantage to pay at the rate of \$7.50 per semester hour.

Fees for Private Lessons in Music. Music 0310, 0410, 0510, 0610, 0710, 0910, 1310, 1410, 1510, 1710, 1910, 3021, 3022, 3023, 3024, 3310, 3410, 3510, 3610, 3710, 3910, 4021, 4022 have the following fees:

One thirty-minute lesson weekly, per semester.....\$ 33.75

Two thirty-minute lessons weekly, per semester..... 67.50

Music 0810, 1810, 3810 have the following fees:

One thirty-minute lesson weekly, per semester.....	60.00
Two thirty-minute lessons weekly, per semester.....	120.00

Room Rent. Room rent is as follows:

\$ 90.00 per semester for Mynders, West, Nellie Angel Smith, North, East, Scates, Hayden; \$25 for each summer term.

\$112.50 per semester for Rawls Hall and Robison Hall (air-conditioned); \$31.25 for each summer term.

An application for a dormitory room must be accompanied by a check or money order for \$25.00 which remains on deposit for the academic year or until the student withdraws. Refunds, less charges for lost keys and damages, are made upon termination of occupancy with the approval of the Dean of Women or the Dean of Men. The student, however, may previously have requested that this deposit be transferred as a deposit on a room for a succeeding term.

The total deposit is refundable upon certification of the Dean of Women or the Dean of Men up to July 1st for a room reserved for the following fall term; after that date and prior to August 15th, only \$10.00 of the deposit will be refunded. Cancellation for the spring and summer terms must be made not later than 15 days before the first day of registration for the term for which the reservation has been made if the deposit is to be refunded. Reservations must be made each spring for the following fall.

Dormitories are not open for the inter-session and post-session courses.

A housing contract must be signed by the student and, prior to his 21st birthday, by both the student and his parent or guardian.

According to a ruling of the State Board of Education, when the number of out-of-town students admitted to dormitory residence reaches 25% of the total number of students for whom space is available, no additional out-of-state students shall be admitted to residence in the dormitories if a Tennessee student who lives outside the University's commuting area is being denied dormitory residence.

Students are responsible for damage to or breakage of dormitory property.

(For further information concerning dormitory accommodations, see pages 52 and 65.)

Cafeteria. The cafeteria is open to all students. The approximate cost of meals per day is \$3.00.

Late Registration Fee. Registration should be completed within the official registration period announced in the catalog and the Schedule of Classes. Registration is not complete until all fees for the semester have been paid. For registration after the end of the official period, an extra fee of \$5.00 for the first day and \$1.00 per day thereafter is charged. Students who delay more than thirty days in completing their registration will not be allowed to register the following semester.

Fee for Adding or Dropping Courses. A fee of \$3.00 is charged for each course which is added or dropped.

Fee for Late Examination. The student must pay a fee of \$1.00 for each final examination taken late. A receipt from the office of the Business Manager will admit the student to any late examination that he is entitled to take. The receipt must be forwarded to the Records Office by the instructor along with the final grade as a requisite for the recording of the final grade of the course. Students are allowed to take late or special examinations only with the approval of the dean of the school concerned and after the payment of the late examination fee.

Transcript Fee. One transcript of the student's academic record at Memphis State University is furnished free. For each additional transcript, a fee of \$1.00 is charged. Transcripts are issued only at the request of the student or his authorized agent.

Diploma Fee. Degree candidates pay a fee of \$15.00, which includes the fee for the diploma, the rental of cap and gown, and other incidentals connected with commencement exercises. This fee is payable in the office of the Business Manager thirty days before graduation.

Breakage Cards. Students enrolled in classes in chemistry and physics are required to purchase breakage cards. Any unused balance is refunded at the close of the semester.

Payment and Refund of Fees.

1. All fees are payable in advance.
2. If a student withdraws from the University within seven days after the beginning of classes for the semester, a refund will

be made of 80% of fees; each week thereafter, the amount will be reduced 20%.

3. The diploma fee is not refunded.
4. Rooms are rented by the semester in advance; no reduction is made for late registration or for an absence of less than two weeks. No refund of room rent will be made without withdrawal from the University unless authorized by the Dean of Women or the Dean of Men.
5. No student may enroll, graduate, or receive a transcript of his record until all accounts are settled. The term "account" includes any indebtedness to the University.

DORMITORY REGULATIONS

Students entering Memphis State University and wishing to live in the dormitories should make their applications at the earliest possible date. Reservations for the women's dormitories are made with the Dean of Women, for the men's dormitories with the Dean of Men; application forms are available in the offices of the deans.

An application for a dormitory room must be accompanied by a check or money order for \$25.00 which remains on deposit for the academic year or until the student withdraws. Refunds, less charges for lost keys and damages, are made upon termination of occupancy with approval of the Dean of Women or the Dean of Men. The student, however, may previously have requested that this deposit be transferred as a deposit on a room for a succeeding semester.

The total deposit is refundable upon certification of the Dean of Women or the Dean of Men up to July 1st for a room reserved for the following fall term; after that date and prior to August 1st only \$10.00 of the deposit will be refunded. Cancellation for the spring and summer terms must be made not later than 15 days before the first day of registration for the term for which the reservation has been made if the deposit is to be refunded. Reservations must be made each spring for the following fall.

Permission is not granted for women students to live in apartments.

After registration, married students are eligible to apply to the Dean of Men for apartments in Vets Village. Preference in the assignment of space is given to current students (veterans and non-veterans) and then to veterans.

HOSPITALIZATION

Emergencies which require hospitalization of dormitory students are often accompanied by confusion and dangerous delays while parents are notified in order to clear hospital admission for the student who is not covered by hospitalization insurance. For the welfare of the dormitory student and because the University can assume no financial responsibility for hospitalization, it is strongly recommended that each dormitory student be covered by a family policy or be enrolled in the Memphis State University Student Insurance Plan, which has University support and approval. For further information concerning health services, see page 71.

STUDENT CONDUCT

It is assumed that applicants for admission to Memphis State University are ladies and gentlemen, and every consideration will be shown them as such until, by their own acts, they forfeit the confidence reposed in them. Rules of government and regulations in regard to general conduct are, of course, necessary. Whenever any number of people live together, each must forfeit some individual privileges for the general good. The rules and regulations at Memphis State University are of such nature as to secure ready conformity and also sympathy and cooperation on the part of students in making them effective. These rules and regulations are outlined in the Student Handbook, distributed to all students at the time of initial registration; each student is expected to keep this handbook and use it as a guide during his residence at Memphis State University.

AUTOMOBILES ON THE CAMPUS

Each person who expects to operate and park an automobile on the campus of Memphis State University must register it in the traffic office, Room 117, Administration Building, and receive an official permit. Permits are valid from September through August.

Limited parking space necessitates close regulation of traffic. Each student is responsible for acquainting himself with the campus traffic and parking regulations, copies of which are available in Room 117, Administration Building.

Because zoning restrictions require most dormitory students to leave their automobiles on the city streets, and because they are considered an academic hazard, these students are urged to leave their automobiles at home.

AIDS AND AWARDS TO STUDENTS

(Unless indicated otherwise, all inquiries concerning scholarships and loans should be addressed to the Scholarships and Loans Office.)

Scholarships

THE ADVERTISING CLUB OF MEMPHIS annually awards a scholarship of \$250.00 to the outstanding junior or senior student majoring in advertising. Applications are to be submitted by April 1 to the chairman of the Department of Marketing.

ALPHA DELTA KAPPA, Lambda chapter, annually awards a \$125 scholarship to a woman student in her junior or senior year preparing to enter the field of teaching.

THE ALPHA XI DELTA award provides an annual scholarship of \$50 to the most outstanding junior woman majoring in mathematics.

THE MEMPHIS CHAPTER OF AMERICAN SAFETY ENGINEERS provides a fund of \$375 annually for men interested in the industrial technology major. This fund is divided into two equal amounts of \$187.50 each, and awards are made to seniors majoring in industrial technology.

THE R. C. ANDERSON SCHOLARSHIP FUND was established by the late R. C. Anderson, the interest from whose estate is to be used to provide scholarships of \$165 per year for young men in their freshman and sophomore years who are residents from Benton, Decatur, or Henderson County.

THE DAVID H. BOWLIN MEMORIAL SCHOLARSHIPS of \$500 each are awarded to students who show outstanding academic promise, but who would not be able to avail themselves of a university education without financial assistance.

THE BURK JOURNALISM AWARD is offered annually to the freshman journalism major who has been judged most outstanding in academic performance and professional promise. The award, providing \$175 for tuition expenses during the winner's sophomore year, is donated by Bill E. Burk, a professional journalist and an alumnus of the Department of Journalism (Class of 1957) at Memphis State University.

THE COTERIE, an organization of women interested in the arts and philanthropies in the arts, provides scholarships to enable young women to continue their studies in the fine arts. Funds for the scholarships come from the Coterie's participation in the activities of the Memphis Shakespeare Festival, Inc.

THE MEMPHIS CHAPTER, FINANCIAL EXECUTIVES' INSTITUTE SCHOLARSHIP of \$250 is awarded annually to a second-semester junior student, majoring in industrial accounting with an interest in becoming a controller. The recipient must have scholastic ability with better than average grades. Applications will be submitted by the dean of The School of Business Administration and the chairman of the Department of Accountancy to the Memphis Chapter's Scholarship Committee.

THE JOSEPHINE CIRCLE SCHOLARSHIP is awarded annually to a beginning freshman. The award is made on the basis of scholastic record, personality, future plans of the applicant, and need.

THE IRA J. LICHTERMAN MEMORIAL SCHOLARSHIPS of \$500 each are awarded to students who show outstanding academic promise, but who would not be able to avail themselves of a university education without financial assistance.

THE P. H. MANNING SCHOLARSHIP FUND was established by the late Professor P. H. Manning, who left the bulk of his estate to be used by the State Board of Education to provide scholarships for young men students meeting certain conditions set forth in his will. The scholarships of \$100 each are given to young men from Carroll, Decatur, Gibson, and Henderson counties.

THE MEMPHIS STATE UNIVERSITY ALUMNI FOUNDATION BOARD grants annually to an incoming freshman who shows evidence of outstanding academic promise a scholarship in the amount of \$165.

THE MEMPHIS CHAPTER OF THE NATIONAL ASSOCIATION OF ACCOUNTANTS annually awards a scholarship of \$100 to an outstanding accounting major selected by the faculty of the Department of Accountancy. A scholarship key is presented to the recipient.

THE PERSONAL LOAN AND FINANCE SCHOLARSHIP of \$250 for two semesters is awarded annually to a freshman majoring in The School of Business Administration. Applicants must have a good academic average and some financial need.

THE SERTOMA CLUB—ROBERT TALLEY JOURNALISM SCHOLARSHIP was established to honor a long-time member of the editorial staff of the Memphis *Commercial Appeal*. Each year the Sertoma Club of Memphis awards a scholarship valued up to \$350 to an advanced journalism student who has done outstanding work at Memphis State University. Applications are to be submitted to the dean of The School of Arts and Sciences.

THE SOUTHERN BOILER AND TANKS WORKS SCHOLARSHIP consists of two awards of \$250 per year for two years for pre-engineering freshman and sophomore students.

THE TENNESSEE SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS awards annually ten scholarships of \$250 each to accounting majors with good academic averages enrolled in qualifying Tennessee colleges. The scholarships are awarded on a competitive basis to the top ten applicants in relation to scholarship, extra-curricular activity, character, and financial need. Applications are to be submitted to the chairman of the Department of Accountancy.

S. C. TOOF & Co. annually awards a scholarship of \$250 to an outstanding junior or senior student majoring in advertising. Applications are to be submitted by April 1 to the chairman of the Department of Marketing.

UNIVERSITY SCHOLARSHIPS. Memphis State University awards annually approximately 250 scholarships to students who have exceptionally good academic records and are residents of the State of Tennessee. These scholarships pay the \$165 annual registration fees required of residents of Tennessee.

THE HORACE H. WILLIS MEMORIAL SCHOLARSHIP of \$250 annually is awarded from time to time to an incoming freshman on the basis of need for financial assistance and evidence of academic promise.

Loan Funds

THE AMERICAN ASSOCIATION OF UNIVERSITY WOMEN LOAN FUND of \$200, administered by the Memphis branch of the AAUW, is available to women students recommended by the University.

THE AULL LOAN FUND of \$250, contributed by Mrs. Genevieve Aull, is to be used for loans to members of the senior class who have demonstrated their scholastic eligibility by one or more years of satisfactory work in residence.

THE ERNEST C. BALL LOAN FUND of \$280.36 is available for loans to eligible students.

THE JOHN WILLARD BRISTER LOAN FUND. On the occasion of the twenty-first birthday celebration of the University, the members of the faculty presented a fund of \$150 to be named in honor of the late President John Willard Brister.

THE CLASS OF 1933 LOAN FUND of \$102 was donated by the Class of 1933 as a class memorial.

DAUGHTERS OF THE AMERICAN REVOLUTION, FORT ASSUMPTION CHAPTER OF MEMPHIS, LOAN FUND of \$500 is available for loans to eligible students.

THE FEDERAL STUDENT LOAN FUND. The National Defense Education Act of 1958 makes available to the University money for loans to superior students; students may borrow as much as \$1,000 each year. The loan bears no interest until one year after the student graduates (and then only three per cent) and may be repaid over a ten-year period. If the graduate teaches, ten per cent of the loan will be cancelled for each year taught for the first five years; thus, one-half of the total amount borrowed will be cancelled after five years of teaching.

THE DR. JENNINGS B. GEORGE LOAN FUND of \$1000 was established in honor of Dr. Jennings B. George.

THE OWEN ROGERS HUGHES MEMORIAL LOAN FUND of \$100 is available for loans to eligible students.

THE KAPPA LAMBDA SIGMA AND PHI LAMBDA DELTA LOAN FUND of \$206 was presented by the Kappa Lambda Sigma sorority and the Phi Lambda Delta fraternity in memory of those members of Phi Lambda Delta who lost their lives in World War II.

THE MARION CIRCLE LOAN FUND of \$100 is available for loans to eligible students.

THE DELTA OMICRON CHAPTER OF PHI DELTA KAPPA sponsors a loan fund of \$500, available in \$125 loans to full-time undergraduate seniors and full-time graduate students who are planning to be teachers.

THE QUOTA CLUB LOAN FUND, administered by the Quota Club of Memphis, makes funds available to women students of junior or senior rank. Applications are to be submitted to Mrs. Ellen Davies Rodgers, chairman of the Education Committee of the Memphis Quota Club.

THE SHELBY COUNTY PARENT-TEACHER ASSOCIATION LOAN FUND of \$602.38 is available in varying amounts to eligible students.

THE TENNESSEE EDUCATIONAL LOAN CORPORATION, created by action of the 83rd General Assembly of the State of Tennessee, guarantees repayment up to 95% of loans made by Tennessee banks, or other lending institutions, to students from Tennessee who need to borrow money for their college education. This program enables lending institutions to provide long-term, low-interest loans on good character and academic promise rather than on customary credit standing or collateral.

THE UNITED STATES DAUGHTERS OF 1812 LOAN FUND of \$650, donated by the Old Hickory Chapter, USD of 1812, Memphis, consists of three awards: (1) the Mary Robinson Day Memorial Scholarship of \$250; (2) the Martha Moore Allen Scholarship of \$250; and (3) the Willis Hitzing Scholarship of \$125. All three of these awards are loan funds and may be awarded to a man or woman on recommendation of the faculty.

THE ZONTA CLUB OF MEMPHIS LOAN FUND of \$250 is available to eligible junior and senior women. Applications are to be made through the Dean of Women who will submit the names to a committee of the Zonta Club for approval and selection.

Awards

THE COLLEGIATE CHAPTER OF THE AMERICAN MARKETING ASSOCIATION each year makes an award of a plaque to the outstanding senior majoring in marketing.

THE MEMPHIS CHAPTER OF ARCHITECTURAL WOODWORKERS offers cooperative employment opportunities for senior students majoring in drafting and design and in construction technology.

THE CHEMICAL RUBBER PUBLISHING COMPANY annually awards the *Handbook of Chemistry and Physics* to two freshman students selected by the faculties in chemistry and physics as outstanding in these fields of study.

THE PHI CHAPTER OF CHI BETA PHI, national honorary scientific fraternity, annually awards a plaque to the student who has attained the highest average grades during his four years of study in each of the disciplines of biology, chemistry, mathematics, and physics.

THE CITY PANHELLENIC ASSOCIATION makes an annual award to the sorority woman in the graduating class with the highest average.

DELTA SIGMA PI, the international business fraternity, annually awards a scholarship key to the man in The School of Business Administration graduating with the highest scholastic average in business subjects.

THE GOOCH FOUNDATION makes an annual award to the freshman holder of a Gooch Scholarship who has the highest scholastic average for the year.

PHI GAMMA NU, the professional sorority in business, each year presents a scholarship key to the woman business graduate who has maintained the highest scholastic average in The School of Business Administration.

THE SIMON AND GWYNN MARKETING AWARD is given annually to a senior majoring in marketing for the best treatise on a selected subject on advertising or marketing. The award consists of \$100 and a trophy.

THE STUDENT GOVERNMENT ASSOCIATION of the University makes an award at each convocation to the man in the class who, graduating with honors, shows the highest scholastic attainment.

THE SMEAD AWARD is presented to the outstanding graduate in the field of business education who is planning a career of teaching.

THE MEMPHIS CHAPTER OF THE TENNESSEE SOCIETY OF CERTIFIED PUBLIC ACCOUNTANTS presents a plaque each year to the graduating student who has the highest overall scholastic average among all accountancy majors.

THE WALL STREET JOURNAL annually awards a plaque and a year's subscription to the *Journal* to the most outstanding graduate in the fields of management or finance.

THE WOMEN'S ASSOCIATION OF THE UNIVERSITY makes an award at each convocation to the woman member of the senior class who, graduating with honors, shows the highest scholastic attainment.

STUDENT SERVICES AND ACTIVITIES

(All student services are coordinated through the office of the Dean of Students.)

Health Service

Services of physicians and registered nurses are provided for minor treatment and consultation in the University Health Center, located on the first floor of the Administration Building. The student is financially responsible for hospitalization or medical care beyond that offered by the Health Service. Arrangements for medical care of resident students must be made in consultation with the Health Center staff; parents of resident students will be notified when additional medical services are necessary. For recommendations concerning hospitalization provisions for dormitory students, see page 66.

Special sickness and accident insurance policies for students are available; they are particularly valuable to those students whose coverage under family policies has terminated. Policies are issued by a private agency, authorized and approved by the University; details are available at the time of registration.

Bookstore

The University Bookstore, located south of the Field House, is self-service and is stocked with textbooks and supplies required or recommended for every course offered in the University.

Post Office

The University Post Office is located on the first floor of Jones Hall. Each dormitory student is expected to rent a mailbox to facilitate the handling of his mail, which should be addressed to him at Memphis State University Station, Memphis, Tennessee, 38111.

Counseling Service

The Testing and Guidance Center provides both vocational and personal counseling for students of the University. In the former case the Center will provide psychological testing, evaluation, and guidance for those students who find themselves undecided about their occupational choice. In the latter instance, it may be profitable for students with personal or emotional problems to discuss these with a trained counselor. Students seeking academic guidance should see their academic advisers.

In general, the student will make contact with the Center by way of referral through the Student Health Center, the Student Deans, or faculty members. However, the student may avail himself of these services by going directly to the Center, Room 204, Administration Building.

Placement Services

The Office of Alumni Placement, located in Room 324 of the Administration Building, arranges interviews between graduating students and prospective employers and maintains an active file of employment opportunities for alumni who wish to change positions or advance in their fields.

Teacher placement, because of its specialized nature, is handled in the Office of Teacher Placement, located in Room 416, Education Building.

Part-time employment for undergraduate students is handled through a branch office of the Tennessee Department of Employment Security, located on the first floor of the Administration Building, Room 120. In cooperation with employers throughout the metropolitan area of Memphis, this office attempts to place students in part-time work that is in keeping with their ultimate employment goals. Part-time employment for freshmen is discouraged.

Athletics

The University sponsors a two-phase athletic program, intramural and intercollegiate. The intramural program is under the supervision of the Department of Health and Physical Education. Policies for intercollegiate athletics are set by the University Committee on Athletics.

The intramural program operates throughout the year and provides students with opportunities to compete in seasonal sports either as individuals or as members of teams from the various student organizations. Individual competition is offered in tennis, shuffle-board, badminton, table tennis, archery, handball, golf, billiards, and football field events. Team participation is offered

in softball, bowling, basketball, volleyball, and track. Recreational equipment may be borrowed from the recreational loan office.

The intercollegiate program sponsors teams in football, basketball, baseball, track, golf, tennis, and gymnastics. These teams compete in a regular schedule with teams from other recognized institutions of the same scholastic level as Memphis State University.

Athletic facilities on the campus include four gymnasiums, ten all-weather tennis courts, six handball courts, a football field, and a quarter-mile running track.

The Department of Health and Physical Education is closely associated with both the intramural and intercollegiate programs. All coaches serve as instructors in this department, and students utilize the two programs and facilities in preparation for careers in the fields of health and physical education.

Alumni Association

The Memphis State University Alumni Association, with offices in Room 322 of the Administration Building, maintains active contact with graduates for the mutual benefit of alumni and the University. Annual meetings of the association are held on the campus each autumn as an important feature of the Homecoming Weekend. The Alumni Association also publishes the alumni magazine, *The Columns*, which is sent quarterly to members.

Extra-Curricular Activities

A variety of extra-curricular activities under competent supervision and direction are included in the University's program, and furnish valuable experience and training for the students. Participation in extra-curricular activities is a privilege extended only to students who are in good standing and who meet the particular requirements of the various organizations. Invitations to membership, when required, are extended by the individual organizations.

The following activities and services are provided free of charge to full-time students: *The Tiger Rag*, *Phoenix*, *Student Handbook*, *DeSoto* (if student has picture made), intramurals, athletic events, and most cultural events on campus unless a reserved seat is desired.

No attempt is made in the following section to present an exhaustive or detailed account of all organizations and their activities. Full information is provided in the Student Handbook, distributed to all students at the time of registration. Copies are available in the offices of the Dean of Students, the Dean of Men, and the Dean of Women.

STUDENT GOVERNMENT. The Student Government Association is composed of officers, a legislature, and a judiciary elected annually by the student body. It exercises responsibility in those areas of student life delegated to it by the University and represents student opinion in working with the administration toward the good of the University.

PUBLICATIONS. Students write and edit *The Tiger Rag*, the weekly newspaper; *The DeSoto*, the University yearbook; and *The Phoenix*, the literary magazine.

ART. The Department of Art sponsors exhibitions of art works throughout the year. The galleries in Jones Hall and in the library display the work of national and local talent in addition to faculty shows and the annual student exhibit. Lectures and films on art are also a part of the department's yearly program.

MUSIC. Qualified students, whatever their majors, may participate in the numerous musical groups organized and directed by the Department of Music, including the University Symphony Orchestra, the Music Education Orchestra, the University Bands (marching, concert, and stage), and a variety of choral groups and small instrumental ensembles. In addition to offering concerts and recitals throughout the year, the Department of Music presents annually a major oratorio and a grand opera, the latter in cooperation with the Department of Speech and Drama. Copies of programs for the musical events of the 1964-65 season will be mailed upon request; letters should be addressed to the chairman of the Department of Music.

SPEECH AND DRAMA. Qualified students, whatever their majors, are invited to audition for roles in the plays produced each year by the Department of Speech and Drama and in the Shakespearean play produced annually by the Memphis Shakespeare Festival, Inc., and the Department. In addition to its six major productions during the academic year, the Department of Speech and Drama sponsors the Lunch Box Theatre, a student-organized and operated experimental theatre; the Readers Theatre, designed to present concert readings and programs of oral interpretation; and the forensics program, affording students opportunities to participate in debate, extemporaneous speaking, oratory, after-dinner speaking, oral interpretation, and discussions. From this latter group are chosen those students who represent the University in its extensive intercollegiate forensics program. During the summer the Department offers a repertory program of three plays and sponsors a Forensics Institute for high-school students.

THE GOODWYN INSTITUTE LECTURES. The Goodwyn Institute, founded and endowed by William A. Goodwyn, philanthropist and former citizen of Memphis, provides a series of free lectures and addresses covering a wide variety of subjects. The aim of the Institute is to offer to the citizens of Memphis and the students of the University authoritative and accurate information upon all kinds of practical and cultural subjects. Public forums frequently follow the lectures, all of which are held in the University auditorium. Admission is free, and reserved seat tickets may be obtained in the office of the Director of the Goodwyn Institute or in the office of the Dean of Men.

RELIGIOUS ACTIVITIES. Religious life on the campus is under the direction of a standing committee of the faculty and a student religious council functioning in cooperation with the Student Government Association. The major religious bodies maintain meeting facilities adjacent to the campus, each supervised by its own staff; they provide activities adapted to the needs of the University community and designed to aid in the continuing religious growth and development of faculty and students. The organized

religious groups include the Baptist Student Union, Canterbury Club, Chi Alpha, Disciples Student Fellowship, Hillel Foundation, Koinonia Club, MSCF, Newman Club, Wesley Foundation, Westminster Fellowship, and Wittenberg Society. Each year the Religious Activities Committee of the faculty and the Student Religious Council sponsor a Religious Emphasis Week, during which outstanding leaders of all denominations are brought to the campus for student assemblies, lectures, and seminar.

SCHOLARSHIP, LEADERSHIP, AND PROFESSIONAL ORGANIZATIONS. Many national honorary societies, devoted to encouraging high standards of scholarship, leadership, and professional competence, maintain active chapters on the campus. In addition, most departments and subject-matter areas sponsor local clubs to provide majors and other interested students with experiences and activities not always available in the class room. Organizations petitioning for membership in a national society maintain all standards required for affiliates. Local organizations operate under charters issued by the Student Government Association; revocation of a charter entails loss of University recognition and sanction. Detailed information concerning the following organizations, including requirements for membership, purposes, and specific activities, will be found in the Student Handbook and from sponsoring departments. Meetings are announced on bulletin boards and in *The Tiger Rag*.

Accounting Club	Phi Delta Kappa (men in education)
Alpha Lambda Delta (freshman women)	Phi Gamma Nu (women in business administration)
Alpha Psi Omega (drama)	Philosophy Club
American Chemical Society (student section)	Phi Mu Alpha Sinfonia (men in music)
American Institute of Physics (student section)	Physical Education Clubs
American Marketing Association	Pi Delta Epsilon (journalism)
Angel Flight	Pi Sigma Epsilon (sales)
Arnold Air Society	Pre-Engineering Club
Band	Pre-Legal Club
Biology Club	Pre-Medical Club
Chi Beta Phi (science)	Psi Chi (psychology)
Collegiate Management Society	Psychology Club
Delta Mu Delta	Sabre Air Command
Delta Pi	Scrollers
Delta Sigma Pi (commerce)	Sigma Alpha Chi (military services)
Delta Theta Phi (law)	Sigma Alpha Iota (women in music)
Deutscher Verein (German)	Sigma Delta Pi (Spanish)
Folk Dancers	Social Science Club
Home Economics Club	Sock and Buskin
La Rive Gauche (French)	Student National Education Association
Liberal Arts Honor Society	Tassel (women)
Mathematics Club	Tau Kappa Alpha
Modern Dance Club	Young Democrats
Omicron Delta Kappa (men)	Young Republicans
Orchesis (dance)	
Phi Alpha Theta (history)	

SOCIAL FRATERNITIES AND SORORITIES. Ten national fraternities maintain chapters at the University: Acacia, Alpha Epsilon Pi, Alpha Tau Omega, Kappa Alpha, Kappa Sigma, Lambda Chi Alpha, Pi Kappa Alpha, Sigma Alpha Epsilon, Sigma Chi, and Sigma Phi Epsilon. Most of them own houses off the campus and offer limited rooming facilities to upperclassmen. Student supervision and coordination of their activities are provided through the Interfraternity Council.

Twelve national sororities maintain chapters at the University: Alpha Delta Pi, Alpha Gamma Delta, Alpha Phi, Alpha Xi Delta, Delta Gamma, Delta Sigma Theta, Delta Zeta, Gamma Phi Beta, Phi Mu, Pi Beta Phi, Sigma Delta Tau, and Sigma Kappa. Most of them have suites in the Panhellenic building. Student supervision and coordination of their activities are provided through the Panhellenic Council.

University supervision of fraternity and sorority activities is provided through the offices of the Dean of Students and the Dean of Women.

Part Five

ACADEMIC REGULATIONS

THE ACADEMIC YEAR

THE academic year begins in September and covers a period of forty-eight weeks divided into two semesters and a summer session. Each semester is approximately eighteen weeks in length, and the Summer Session is divided into two terms of from five to six weeks each. Students may enter at the beginning of either of the regular semesters or at the beginning of either of the two terms of The Summer Session.

ORIENTATION, COUNSELING, AND REGISTRATION

An orientation program for all new undergraduate students is held on the days preceding registration as outlined in the University Calendar. During these orientation sessions, members of the administration and faculty introduce the new students to various programs of study, general University regulations, and basic registration procedures. Students are assigned to faculty advisers in the field of their major interest who aid them in selecting the appropriate courses. Throughout his residence at the University, each student has the assistance of his faculty adviser in all scholastic matters. *This assistance, however, does not relieve the students of the responsibility of studying the catalog himself and fulfilling all of the requirements therein for his particular goal.* It is expected that a student who has attained senior standing will consult with the dean of his school in regard to the fulfilling of the requirements for his chosen degree.

The Schedule of Classes, published a few weeks before the beginning of each semester and available from the office of the Dean of Admissions, contains a detailed outline of the registration procedure. Students are urged to study these schedules carefully and to keep them available for immediate reference during the registration period and throughout the semester. All students are expected to register on the dates indicated in the calendar; although registration is permitted after these dates, a late registration fee is charged and there is no reduction in other fees. Students who delay more than thirty days in completing their registration will not be allowed to register the following semester. Only those students, who enter during the first week of a semester are allowed to enroll for a full schedule of semester hours credit; late entrants are required to limit their loads. In no case is credit allowed in any course for which the student is not duly registered; and all courses for which the student is registered are recorded as passed (with a

letter grade), failed, incomplete, withdrew passing, withdrew failing, or dropped. No student will be granted credit for a course which is not properly entered on his official registration card. Registration is not complete until all fees for the semester have been paid.

CLASSIFICATION OF STUDENTS

Students having 25 semester hours of credit and two semesters of residence are classified as sophomores; students having 55 semester hours of credit and four semesters of residence are classified as juniors; students having 85 semester hours of credit and six semesters of residence are classified as seniors.

Special students. Only those students who hold baccalaureate degrees and who are registered in courses for undergraduate credit may be classified as special students. All others, whether full- or part-time, are classified as freshmen, sophomores, juniors, seniors, or graduate students.

Adult-Special Students. For information concerning admission as an adult-special student see page 59.

Students who have completed the required number of hours and the required residence to be classified as juniors but who have not completed their basic requirements in the Lower Division must schedule these uncompleted requirements during the first semester following in which such courses are available.

CREDIT HOURS AND MAXIMUM LOAD

The unit of credit at Memphis State University is the semester hour; a semester hour is defined as the credit earned for the successful completion of one hour per week in class for one semester; or two hours per week of laboratory work for one semester. (A course which gives three semester hours credit will normally meet for three lecture or recitation hours per week; or for two lecture or recitation hours and two laboratory hours per week; or for some other combination of these.) Each lecture hour presupposes a minimum of two hours preparation on the part of the student.

The minimum number of semester hours per semester for classification as a full-time student is twelve. The maximum number of semester hours for a student with less than a B average (3.0) is eighteen (not including the required physical education activity course). A student who has a B average for a semester may, with the permission of the dean of his school, schedule a maximum of twenty-one hours for the following semester.

For each term of The Summer Session, four semester hours is the minimum load for classification as a full-time student; six semester hours is the average load; seven semester hours is the maximum. No student may schedule more than a total of fourteen semester hours in the two terms of The Summer Session.

Only those students who enter during the first week of a semester are allowed to take a full schedule of semester hours credit; late entrants are required to limit their load.

Students who have part-time employment, either on or off the campus, are strongly urged not to register for a full academic load.

GRADES AND QUALITY POINTS

Grades. At the end of each semester or summer term, instructors report to the Records Office the standing of all students in their classes. The grade of a student in any course is determined by his class standing and his examination, combined in such proportion as the instructor in charge of the course may decide. Class standing in any course is determined by the quality of the student's work, the regularity of his attendance, and the thoroughness of his preparation. The instructor's evaluation of the student's work is expressed by letters, which have values, on a scale of 100, as follows:

A, excellent (95-100)	I, incomplete
B, good (85-94)	DW, if a course is dropped
C, satisfactory (75-84)	BW, withdrew from the University during the drop period
D, poor (65-74)	PW, withdrew passing after the drop period
F, failure (64 or below)	FW, withdrew failing after the drop period

The grade of I (incomplete) indicates that the student has not completed the course for some unavoidable reason that is acceptable to his instructor. This grade may be changed by the instructor and credit allowed when the requirements of the course have been met, provided the work has been completed within the first four weeks of the next semester the student is in residence; and provided further that the deficiency is made up within one calendar year from the date the grade of I was given, even if the student has not re-entered the University. If the student fails to complete the course within the specified time, no credit will be given for the course. The fee for a late examination is \$1.00.

All grades, with the exception of I, when once reported, can be changed only by the instructor who reported them, and then only after approval by the faculty Committee on Entrance and Credits.

A student has the privilege of repeating a course in an attempt to improve the grade previously made. The grade he makes the last time the course is taken is the grade that will be considered as the final grade. A student may not attempt the same course more than three times for the purpose of obtaining a passing grade or a higher grade.

All courses for which the student is registered are recorded as passed (with a letter grade), failed, dropped, withdrew passing, withdrew failing, or incomplete. In no case is credit allowed in any course for which the student is not duly registered. No student will be granted credit for a course which is not properly entered on his official registration card.

Quality Points. For the purpose of computing averages, grades are converted to quality points. Each grade of A counts 4 quality points per semester hour; B, 3 quality points; C, 2 quality points; D, 1 quality point; F, DW, BW, PW, and FW, no quality points.

In computing a student's scholarship ratio, or quality point average, all courses attempted are included. As an example: a student carrying five three-semester-hour courses for a total of 15 semester hours makes the following grades: A, B, C, C, F; he has thus accumulated quality points in the amount of 12, 9, 6, 6, 0, for a total of 33. In computing his quality point average, the number of hours attempted (15) is divided into the quality points earned (33) for an average of 2.2.

CLASS ATTENDANCE

Students at Memphis State University are expected to give their scholastic obligations first consideration. Prompt and regular class attendance is considered necessary for satisfactory work. It is expected that a student will regard an engagement to attend classes as he would any other engagement or conference with an instructor. All reasons for absence should be submitted as soon as possible to the instructor. The satisfactory explanation of absences does not in any sense relieve the student from responsibility for the work of his course during his absence. The instructor in charge of a course determines in all instances the extent to which absences and tardiness affect the student's grade. Absences are counted from the first scheduled meeting of the course.

Absence from the final examination without the permission of the instructor incurs a mark of F.

CREDIT BY CORRESPONDENCE OR EXTENSION

Memphis State University accepts a limited number of credits earned by correspondence and/or extension, provided that such credits are taken from an institution which is a member of the University Extension Association, The Teachers College Extension Association, or the appropriate regional accrediting association. Memphis State University offers some work by extension but none by correspondence.

No student may enroll for correspondence or extension courses without written permission for the dean of the school of the University in which he is enrolled. No student is permitted to enroll for correspondence or extension courses while carrying a full load at Memphis State University.

Not more than one-fourth of the semester hours applied on the bachelor's degree may be earned by correspondence or extension or a combination of the two.

A student who has completed the two semesters of required residence in his junior and senior years and who lacks NO MORE than four semester hours toward completion of degree requirements may earn these additional credits by acceptable correspondence or extension work, or by residence at another approved institution, (For details of residence requirements, see page 88.)

ADVANCED PLACEMENT CREDIT

Memphis State University participates in the Advanced Placement Program of the College Entrance Examination Board. A maximum of twelve semester hours may be given to qualified students on the basis of the examinations conducted by the Board. To be eligible for credit, an entering freshman must place in group three, four, or five of the CEEB Advanced Placement Tests.

CREDIT BY EXAMINATION

Examinations for credit in courses offered by the University may, under special circumstances, be offered to students who believe they have already mastered the material of the course through private study, technical employment, or the like. The following regulations govern the granting of credit by examination:

1. Permission to take an examination for credit will be given only in instances where the student has already gained fundamental knowledge of the subject. In no case will a student be permitted to take a credit examination in a course which he has audited or taken for no credit,

or in which he has previously made a grade D or F. Nor may he take the examination for credit if he has already earned credit in a course of equivalent or more advanced standing.

2. Permission to take a credit examination will be granted only to students who are registered for no less than 12 semester hours in residence and who are in good academic standing. Permission to take a credit examination must be secured from the instructor of the course, the department chairman, and the dean of the school in which the student is registered. After permission has been granted, the Dean of Admissions will issue an official permit for the examination after the payment of the cost of the examination plus a fee of \$3.00 per semester hour. No instructor may give a credit examination until the official permit from the Dean of Admissions is presented.

3. Credit examinations normally will be given in conjunction with the final examination in the course for which credit is sought. The faculty and administrative personnel involved may choose to require a standardized examination instead of the final examination, or in addition to it. In no case will credit examinations be administered while the University is not in session.

4. The maximum credit which may be established through credit examination is 15 semester hours with not more than 8 semester hours in one area. Credit for course work earned on an examination basis will not be recorded until the student has successfully completed a more advanced course in the subject with at least a C grade.

5. Credit examinations are indicated on the student's record as P. To pass a credit examination the student must make a grade equivalent to at least a C in the course. Grades on credit examinations will not be used in computing the quality point average.

COURSES FOR NO CREDIT

Students who are not candidates for a degree, and who do not desire to meet admission requirements and earn credit at Memphis State University, may take certain courses for no credit. Anyone interested should consult the dean of the school in which the course he wishes to take is offered.

ADDING AND DROPPING COURSES

After the official registration period is over the student may make adjustments in his schedule through the process of adding and/or dropping courses. Courses may be added only during the first five days of classes (three days in The Summer Session). Courses may be dropped only during the first three weeks of classes (five days in The Summer Session). Exact dates of termination are carried in the University Calendar.

A course may be added or dropped only by permission of the student's adviser and the dean of the school in which the student is registered. A fee of \$3.00 is charged for each course added or dropped. Dropping a course without permission incurs the grade of F.

WITHDRAWAL FROM THE UNIVERSITY

A student who wishes to withdraw from the University must notify the Dean of Students promptly in writing. Failure to give such notification will result in grades of F on all courses for which the student is registered. Students enrolled in The Evening Division should report their withdrawals to the office of the director of The Evening Division.

Withdrawal from the University is not permitted within one week of the beginning of the final examination period of a semester or a summer term.

Any student who withdraws after the termination of the period during which courses may be dropped (see above, Adding and Dropping Courses) will have all courses not previously dropped recorded as either PW (withdrew passing) or FW (withdrew failing).

SCHOLASTIC STANDARDS

The Dean's List. The Dean's List is composed of those students who complete a minimum of fifteen semester hours with a grade point average of at least 3.4.

Retention Standards. A minimum quality point average of 2.0 is required for graduation from the University. A student who has acquired 66 or more semester hours credit with less than a 2.0 average will be warned. Failure to bring the scholastic average up to 2.0 in a reasonable time will lead to exclusion from the University.

Probation. A student who makes less than a 1.5 quality point average for a semester will be placed on scholastic probation. If, during his next semester of attendance, the student's quality point average is again below 1.5, he will be suspended for an indefinite period of not less than one full semester. If, at the end of his suspension he is readmitted to the University, he must remove probation during the first semester of his readmittance. A quality point average of 1.5 will remove the student from probation.

Any student who fails probation the second time is excluded from the University. A student who withdraws while on scholastic probation is presumed to have failed his probation.

Part Six

GRADUATION FROM THE UNIVERSITY

DEGREES OFFERED

THE degrees conferred by Memphis State University are offered through The School of Arts and Sciences, The School of Business Administration, The School of Education, The School of Law, The Department of Industrial Technology, and the Graduate School, as follows:

The School of Arts and Sciences: *Bachelor of Arts, Bachelor of Science, Bachelor of Science in Chemistry, Bachelor of Fine Arts, Bachelor of Music, Bachelor of Science in Medical Technology*

The School of Business Administration: *Bachelor of Business Administration*

The School of Education: *Bachelor of Science in Education*

The School of Law: *Bachelor of Laws*

The Department of Industrial Technology: *Bachelor of Science in Industrial Technology*

The Graduate School: *Master of Arts, Master of Science, Master of Business Administration, and Master of Science Teaching*

Courses required for all baccalaureate degrees (except Bachelor of Laws) are outlined in the section which follows; specific requirements for the individual degrees will be found in the sections of the catalog devoted to a description of the undergraduate schools. Requirements for the Bachelor of Laws degree will be found in the Bulletin of The School of Law; requirements for graduate degrees will be found in the Bulletin of The Graduate School.

GENERAL REQUIREMENTS FOR ALL BACCALAUREATE DEGREES

The following requirements have been established by the University for all undergraduate degrees offered. In addition, the student must meet the requirements for his specific degree as established by the school or department in which it is offered.

1. *English.* All students must complete successfully English 1101, 1102, 2101, 2102, or their equivalent. They are to be taken consecutively through the freshman and sophomore years, or until completed. No credit will be allowed on any course until all the preceding courses are completed. These courses may not be dropped from the student's schedule except under very special conditions.

2. *History.* All students must complete successfully History 2601 and 2602, or their equivalent. These courses are not open to students who have earned less than 25 semester hours credit.

3. *Science.* All students must complete successfully one year in a natural or physical science; this requirement must be met with a two-semester sequence course in one science (biology, chemistry, mathematics, physical geography and geology, or physics).

4. *Physical Education.* Four semesters of physical education activity courses are required of all students during the first four semesters in the University, except those who complete two years of Air Force ROTC for whom only two semesters of physical education are required. All students are required to take Physical Education 1001 for one or two semesters; they may then complete their requirements by selecting activity courses numbered 1111 or above. No student other than a physical education major may apply more than four semester hours of basic physical education to the minimum degree requirements of 132 semester hours. A student unable for medical or other reasons to take regular physical education is required to register for an adaptive class, or otherwise follow recommendations of the office of health services.

5. *English Proficiency.* Every student who enters Memphis State University on or after September 1, 1961 is required to pass an English proficiency examination. He becomes eligible to take the examination only after he has successfully completed 70 semester hours of work. Students who transfer to Memphis State University on or after September 1, 1961, with 70 or more semester hours are eligible immediately to take the examination. Anyone who enrolled at Memphis State University as a regular student prior to September 1961, will not be required to take the examination unless his program is reorganized under the provisions of the catalog of 1961 or later. Dates of the examinations are listed in the University Calendar. For further details see Associate Professor William R. Osborne, Chairman of the Committee on English Proficiency, Room 301-A, Administration Building.

6. *Air Force Officer Education Program (ROTC).* All able-bodied full-time male students under 26 years of age are required to complete successfully the basic course (4 semesters) of the ROTC Program as a graduation requirement. Veterans and six month active duty trainees may be excused; excuse cards may be obtained during registration upon proof of military service. A transfer student entering Memphis State University is required to take only the remainder of the basic course offered according to his classification. Freshmen are considered AS-1 cadets until 25 semester hours are obtained. Sophomores are classified as AS-2 cadets if they have 25 to 55 semester hours credit. A transfer student admitted to Memphis State with junior status (55 or more semester hours transferred in good status) is excused from the Aerospace Studies requirement. A student must take part in this program during the first four semesters in school. Should a student fail one of these courses, he must finish the catalog requirements before graduation. If he fails to schedule the prescribed basic course any semester, he will not be allowed to re-enter the University any subsequent term without scheduling the proper basic course each semester thereafter until the two years have been successfully completed. The Professor of Aerospace Studies is the only person authorized to make exception to this regulation and to excuse any student from the required courses.

7. *Quality Point Average.* To receive a bachelor's degree from any of the schools in the University, a student must have at least 132 semester hours credit and at least 264 quality points (133 semester hours and 266 quality points for the Bachelor of Fine Arts); for the method of computing the quality point average, see page 81. If for any reason a student offers more than 132 semester hours credit for graduation, the ratio of two quality points to one semester hour of credit must be maintained. To attain this standard the candidate must have a C average on all courses

attempted in the University. Students who enter Memphis State University with advanced standing are required to maintain an average of C on all courses taken here.

8. *Residence Requirements.* A student will satisfy the residence requirements for graduation by completing, during his junior and/or senior year(s) a minimum of (1) thirty-six weeks of residence and (2) twenty-four semester hours of credit in residence. The final twelve semester hours must be taken in residence. (EXCEPTION: a student who has completed thirty-six weeks in residence during his junior and/or senior year(s) and who lacks no more than four semester hours toward completion of his degree requirements may earn these additional credits by residence at another approved institution or by acceptable correspondence or extension work.)

In computing residence requirements for full-time students the following formulae are used: The successful completion of one semester as a full-time student—i.e., one registered for a minimum of twelve semester hours—gives residence credit of eighteen weeks. The successful completion of one summer term as a full-time student—i.e., one registered for a minimum of six semester hours—gives residence credit of six weeks.

In computing residence requirements for part-time students the following formulae are used: Each semester hour earned in a regular semester gives residence credit of one and one-half weeks, up to a maximum credit of eighteen weeks. Each semester hour earned during a summer term gives residence credit of one week, up to a maximum credit of six weeks.

GRADUATION WITH DISTINCTION

Students who have fulfilled all graduation requirements, who have completed a minimum of sixty semester hours at Memphis State University prior to their final semester, and who have been in residence for a minimum of four semesters prior to their final semester are eligible for designation as honor graduates. Those who have a quality point average of 3.0 and less than 3.5 will be graduated *cum laude*; those who have a quality point average of 3.5 and less than 4.0 will graduate *magna cum laude*; those who have a quality point average of 4.0 will be graduated *summa cum laude*. (In computing averages for honors, the grades of only the first semester of the graduating year will be included.)

A transfer student, in order to be eligible, must have made the required average on all work taken at Memphis State University and must, in addition, have an over-all average which meets the honors requirements; the final average may in no instance be higher than that made at Memphis State University.

Students who already hold a baccalaureate degree are not eligible for these distinctions.

DEFERRED GRADUATION

A student is ordinarily allowed to graduate under the requirements of the catalog of the year in which he enters the University.

If a student begins work on a degree and fails to complete the requirements, he must, after seven years from the date he entered, reorganize his degree plan to conform to the current catalog.

PRE-PROFESSIONAL DEGREE PROGRAM

A student who completes six semesters of undergraduate work before entering certain professional schools may, upon evidence of satisfactory completion of the first year of work in the professional school, be granted a baccalaureate degree from Memphis State University, provided that all the following provisions are met *before the student enrolls in the professional school*:

1. Formal application for his Memphis State University degree must be made to the dean of the school in which the student is enrolled.
2. The choice of a professional school must be approved in writing by the dean of the school in which the student is enrolled.
 - a. The minimum requirements for entrance to professional school must be sixty semester hours of undergraduate work.
 - b. The professional school must be accredited by the recognized national association in its field or must be an integral part of a university accredited by the appropriate regional association.
3. The last two semesters of pre-professional work must be done at Memphis State University.
4. The candidate must complete 99 semester hours in a pre-professional curriculum.
5. The candidate must complete, in his pre-professional curriculum, at least 24 semester hours in courses numbered above 2999, including at least 6 semester hours in his major field.
6. The candidate must meet all freshman and sophomore requirements of the degree curriculum.
7. The candidate must complete a minimum of 24 semester hours in his major area and 18 semester hours in his minor area.

The candidate in the pre-professional degree program should notify the dean of his school of his intentions no later than the beginning of his sophomore year and should, with the guidance of his adviser, plan his program at that time.

REQUIREMENTS FOR TEACHER CERTIFICATION

An undergraduate student at Memphis State University who wishes to receive a certificate to teach in the elementary or secondary schools of the State of Tennessee must (1) file an application for admission to the teacher education program with the Dean of the School of Education; (2) complete successfully all of the University requirements for a baccalaureate degree; and (3) com-

plete successfully the courses outlined in Sections I, II, and III, below. Applications for admission to the teacher education program cannot be considered until the student has completed a minimum of one and one-half years of college work to the satisfaction of the faculty of the School of Education; for further details, see page 134.

Graduate, special, and transfer students who wish certification should confer with the Director of Certification concerning their individual requirements, particularly the credit to be allowed on courses taken elsewhere or at an earlier time.

I. PROFESSIONAL EDUCATION (27 semester hours)

Education 2011, 2111, 3121, and the courses in *one* of the following groups:

For the elementary certificate: Education 3241, 3251, 3261, 3271, and 4821 (9 semester hours).

For the secondary certificate: Education 4441, 4841 (9 semester hours), an appropriate secondary schools methods course, and one elective applicable for secondary school teachers.

II. GENERAL EDUCATION (45 semester hours)

(*Courses taken to meet the requirements of this section may, if applicable, be used to meet the requirements outlined in Section III, below.*)

English 1101, 1102, 2101, 2102.

Health 1102

History 2601, 2602.

Mathematics 1181 for elementary certification; for secondary certification Mathematics 1111 or any higher-numbered mathematics course excluding Mathematics 1291 (Mathematics for Business)

Speech 2911 (for elementary certificate); or Speech 1211, 1311, or 1411 (for secondary certificate)

Science: 9 semester hours (including one two-semester sequence course) in *two* of the following sciences: biology, chemistry, physics, earth sciences. (P. E. majors may take Biology 3630 for second area).

One course (3 semester hours) in one of the following social sciences: anthropology, economics, geography (other than physical geography), political science, and sociology.

One course in the humanities to be chosen from one of the following departments: Art, Classical Languages, Modern Languages (sophomore or above), Music, and Philosophy.

One of the following courses: Home Economics 1101, Psychology 1101, Sociology 1111.

III. SPECIFIC SUBJECT MATTER ENDORSEMENT (Choose A, B, C, D, or E, or any combination of these*)

(*Courses taken to meet the requirements of Section II, above, may, if applicable, be used to meet any part of the requirements of this section.*)

*The student whose major is in The School of Education must complete requirements for certification in two or more teaching areas with a combined minimum of 36 semester hours. (This requirement may be met by the completion of two endorsement areas for the secondary certificate provided they total at least 36 semester hours.) Elementary teachers need meet only the endorsement requirement for Elementary Grades.

A. CORE CURRICULUM (82 semester hours)

Endorsement for core curriculum requires 82 semester hours distributed over the broad fields of language arts, social studies, science, library service, and others. For specific requirements the student should consult the chairman of the Department of Curriculum and Instruction.

B. ELEMENTARY CERTIFICATE (58 semester hours)

Art 1101, 3411.

Biology 2001, 2002.

Geography 2301, 2311.

Health 3302.

History 1301, 3900.

Library Service 3111.

Math 1182, 2581.

Music Education 3231, 3232.

Physical Education 1231, 3806

Physical Science 1031, 1032

Political Science 2211

(NOTE: The 27 semester hours in English, health, history, mathematics, and speech required in Section II above are part of the elementary endorsements.)

C. SPECIAL EDUCATION

To receive a certificate in special education, the student must have completed 45 semester hours of general education and the following requirements:

1. Crippling and Special Health Conditions (15 semester hours)
Special Education 4512, 4171, 4172, 4173, 4882.
Completion of the requirements for the elementary or secondary certificate, including Education 4821, or 4841.
2. Educable Mentally-Retarded (18 semester hours)
Special Education 4151, 4161, 4162, 4881
Education 5551 or 7651
One of the following courses: Art 3531; Education 2111, 4131;
Speech 2621, 2631.
Completion of the requirements for the elementary or secondary certificate.
3. Speech and Hearing (Speech Pathology and Audiology) (51 semester hours)
Special Education 4151
Education 2011, 2111, 3121
Three of the following courses: Education 3821, 4012, 4112,
4131, 5511
Speech 2611, 2621, 2631, 3631, 3641, 3651, 3661, 4601, and 4671.
4. Multiple Disabilities (including cerebral palsy) (27 semester hours)
Special Education 4151, 4161, 4162, 4171, 4172, 4881 (or 4882).
Education 4242 and 5511 (or 7651)
Completion of the requirements for the elementary or secondary certificate, including Education 4821 or 4841, and not less than six semester hours in psychological foundations (satisfied by Education 2111 and 3121).
Speech 2621.

D. KINDERGARTEN THROUGH GRADE 3

To receive a certificate in kindergarten—grade 3, the student must complete the requirements for the elementary certificate and, in addition, must complete Education 3211, 3411, and 4811.

E. SECONDARY CERTIFICATE (Choose one or more endorsements)**1. ART, (24 semester hours)**

Art 1101, 1201, 1204, 1311, 1314, 3161, 3411, 3531.

2. ARTS: FINE AND INDUSTRIAL. (33 semester hours)

Art 1101, 1201, 1204, 3161, 3411.

Industrial Technology: 18 semester hours in industrial technology courses, with not less than 6 semester hours in each of three of the following areas: drafting, woodwork, metalwork, electricity, crafts, mechanics.

3. BUSINESS

All applicants for certification in business subjects are required to complete (a) a group of basic courses and (b) additional courses for endorsement in one or more specific fields; the same course may be applied in both areas.

a. Basic requirements (18 semester hours)

Accounting 2010, 2020.

Economics 2110, 2120.

One course from each of two of the following areas:

Management 1010, 3010 ; Secretarial Science 3510, 3520 ; Mathematics 2291.

b. Specific endorsement field (choose one or more)**(1) Bookkeeping (10 semester hours)**

Accounting 2010, 2020, 2720, and one additional upper-division course in accounting.

(2) Business Arithmetic (6 semester hours)

Mathematics 1211 and 2291

(3) Business English (3 semester hours)

Secretarial Science 3510 or 3520

(4) Business Law (6 semester hours)

Management 3010, 3020

(5) Business machines (3 semester hours)

Management 2710 or Secretarial Science 3310.

(6) Consumer education (3 semester hours)

Economics 3330 or Home Economics 4103

(7) Economics (12 semester hours)

Economics 2110, 2120, and two additional upper-division courses (6 semester hours) in economics

(8) General business (9 semester hours)

Management 1110, 3010 ; and a minimum of 3 semester hours in mathematics, the specific courses to be chosen in conference with the adviser

(9) Office and clerical practice (3 semester hours)

Secretarial Science 4320, or 4330, or 4410.

(10) Salesmanship (6 semester hours)

Marketing 3010, 3410.

(11) Secretarial practice (15 semester hours)

Endorsement in office and clerical practice, shorthand, and typewriting

- (12) Shorthand (6 semester hours)
Six semester hours in shorthand, including one upper-division course
- (13) Typewriting (6 semester hours)
Six semester hours in typewriting, including one upper-division course
4. ENGLISH (18 semester hours in upper-division courses)
English 3214; 3221 or 3222 or 3223; 3321; 3322; 3501; 4243 or 4233
In addition to 18 semester hours in the required advanced English courses, it is highly recommended that the student have 3 semester hours credit chosen from modern or contemporary literature: English 3342, 4242, 4252, 4351, 4441
5. FOREIGN LANGUAGE (18-24 semester hours)
Endorsement may be obtained in French, German, Latin, and/or Spanish; the specific courses to meet certification requirements must be selected in conference with the chairman of the department in which the language is offered. Semester hour requirements are as follows:
If two or more units of one foreign language were taken in high school: 18 semester hours in that language
If fewer than two units were taken in high school: 24 semester hours in one language
(If a student has had two or more units in each of two foreign languages in high school, he may be certified in both languages if he completes a total of 30 semester hours in these same languages, with a minimum of 12 semester hours in each.)
6. HEALTH INSTRUCTION (15 semester hours)
Health 2102, 2202, 3102, 3202
One of the following courses: Health 4802; Home Economics 4101; Sociology 2420; Special Education 4173. (Health 4302 may be elected with permission of the Chairman of the Department of Health and Physical Education).
7. HEALTH AND PHYSICAL EDUCATION
For Men (30 semester hours)
Health 1102; 2102 or 3502, 3102, 3202 (12 semester hours)
P. E. 1101, 1251, 1311, 1321 (4 semester hours)
P. E. 2103 or 2203 or 2303 or 2402, 3203, 3303, 3503, 3603, and 4503 (14 semester hours)
Biology 1631, 1632.
For Women (32 semester hours)
Health 1102, 2103, 3102, 3202 (12 semester hours)
P. E. 1101, 1221, 1251, 1291, 1321 (5 semester hours)
P. E. 3103, 3203, 3303, 3503, 3603, 4503 (15 semester hours)
Biology 1631, 1632.
8. HOME ECONOMICS (non-vocational) (30 semester hours)
Home Economics 1105, 2102, 2130, 2202, 2205, 3302, 3305, 4101, 4103, 4104

9. INDUSTRIAL ARTS (18 semester hours)

Eighteen semester hours in industrial technology courses, including at least 9 semester hours in one of the following areas of specialization: drafting, woodwork, metalwork, electricity, crafts.

10. LIBRARY SERVICE (12-18 semester hours)

Endorsement may be obtained as either (a) librarian or (b) teacher-librarian.

- a. Librarian: Library Service 3111, 3121, 3131, 4231, 4232, 4331
- b. Teacher-librarian: Library Service 3121, 4231, 4331, and one of the following courses: Library Service 3111, (for elementary certification) or Library Service 3121 (for secondary certification).

11. MATHEMATICS (19 semester hours)

Mathematics 1212, 1321, 2321, and 6 additional semester hours in mathematics courses.

12. MATHEMATICS AND PHYSICAL SCIENCE (51-53 semester hours)

Mathematics 1212, 1321, and 5 additional semester hours in mathematics courses.

Chemistry 1111, 1112.

Physics 2111, 2112 (or Physics 2511, 2512)

Physical geography or geology: 8 semester hours

Mathematics and/or physical sciences electives: 12 semester hours

13. MUSIC (39-45 semester hours)

All applicants for certification in music are required to complete

(a) a group of basic courses and (b) additional courses for endorsement in a specific field.

(a) Basic requirements (30 semester hours)

Music 1032 (and 1012), 1033 (and 1013), 2031 (and 2011), 3235

One of the following courses: Music 1041, 1131, 3131, 3132.

Applied music: 12 semester hours (in class instruction or individual lessons) approved by the Chairman of the Department of Music Education.

(b) Specific field of endorsement (Choose either or both)

(1) School music (9 semester hours)

Music 3236.

Music Education 1311, 1711, 1911, and 4231.

(2) Instrumental music (15 semester hours)

Music 3035, 3236.

Music Education 4232.

Applied music (on one instrument): 6 semester hours

14. SCIENCE

Endorsement may be obtained in (a) biology, (b) chemistry, (c) physics, (d) general science, and/or (e) a combination of sciences.

(a) Biology (28 semester hours)

Biology 1200, 1600 (9 semester hours)

Biology, Genetics 3070 (4 semester hours)

Biology, Bacteriology 3500 (4 semester hours)

Biology, Ecology 3050 (3 semester hours)

Chemistry 1111, 1112 (8 semester hours)

- (b) Chemistry (28 semester hours)
Chemistry 1111, 1112 (8 semester hours)
Chemistry, Organic 3211, 3212 (8 semester hours)
Chemistry, Analytical (4 semester hours)
Physics (8 semester hours)
- (c) Physics (28 semester hours)
Physics 2111, 2112 or 2511, 2512 (8-10 semester hours)
Physics electives (12-10 semester hours)
Chemistry (8 semester hours)
- (d) General Science (29 semester hours)
Chemistry 1111, 1112 (8 semester hours)
Biology 1200, 1600 (9 semester hours)
Physics 1111, 1112 or 2111, 2112 (6-8 semester hours)
Physics 4050 (3 semester hours)
Earth Science or Physical Geography (3 semester hours)
- (e) Broad field of science (32 semester hours)
If a student earns a total of 32 semester hours or more in three of the following sciences, he may receive endorsement for each one in which he has earned a minimum of 8 semester hours: biology, chemistry, geology, physics.

15. SOCIAL STUDIES

Endorsement may be obtained in (a) economics, (b) geography, (c) government, (d) history, (e) sociology, and/or (f) a combination of two or more of these in the broad field of social studies.

- a. Economics (15 semester hours)
Economics 2110, 2120, and 9 additional semester hours in economics courses.
- b. Geography (15 semester hours)
Geography 2301, 2311, and 9 additional semester hours in geography courses.
- c. Government (15 semester hours)
Political Science 1101, 1301, 2211, 2221, and 3 additional hours in political science courses.
- d. History (21 semester hours) plus General Education requirements.
History 1301, 1302, 2601, 2602, and 9 additional semester hours which must include a two-semester upper-division sequence course in history.
- e. Sociology (15 semester hours)
Sociology 1111 and 12 additional semester hours in sociology courses.
- f. With a total of 30 or more semester hours earned in social science courses (including a minimum of 15 semester hours in history) endorsement may be earned for each area in which one has a minimum of 12 semester hours credit. Required courses for each area:
 - History 1301, 1302 and 9 hours of history electives
 - Economics 2110, 2120, and 6 hours of economics electives
 - Geography 2301, 2311, and 6 hours of geography electives
 - Political Science 2211, 2221, and 6 hours of political science electives
 - Sociology 1111, and 9 hours of electives in sociology

16. SPEECH (15 semester hours)

Speech 1311, 1411, 4921, 4922, and 3 additional semester hours in speech courses.

Part Seven

THE SCHOOLS AND DIVISIONS OF THE UNIVERSITY

THE SCHOOL OF ARTS AND SCIENCES

WALTER RHEA SMITH, B.A., M.A., Ph.D., *Dean*
Room 217, Administration Building

THE School of Arts and Sciences has three distinct functions within the framework of the University.

1) Its primary function is to offer a strong liberal arts program designed to help the student prepare himself for life in his own cultural setting by acquiring the means and the desire continually to enlarge his intellect and deepen his insights. "The purpose of education," wrote John Stuart Mill, "is to make capable and cultivated human beings. Men are men before they are lawyers, physicians, or manufacturers; and if you make them capable and sensible men, they will make themselves capable and sensible lawyers and physicians." It is the earnest belief of The School of Arts and Sciences that the essential preparation for any profession or vocation is a thorough foundation in those major fields of human interest which are included in the humanities, the natural sciences, and the social sciences. The program of liberal studies at Memphis State University aims to provide the student with a store of factual knowledge; to introduce him to varying sets of principles; to stimulate him to think about and to evaluate these facts and principles; and to encourage him to order his own affairs and those of his society with the talent, insight, and discrimination which he develops.

2) The School of Arts and Sciences offers this kind of education, not only to the candidates for its own degrees, but also to the students of other schools of the University, all of whose degree plans call for courses in the liberal arts.

3) A third important function of the school is to offer preparatory courses for students interested in careers in medicine, dentistry, nursing, teaching, engineering, law, and other professions; specific pre-professional programs, designed to prepare students to qualify for admission to professional schools, are available.

DEGREES OFFERED

The School of Arts and Sciences offers six degrees: the Bachelor of Arts, the Bachelor of Science, the Bachelor of Fine Arts, the Bachelor of Music, the Bachelor of Science in Chemistry, and the

Bachelor of Science in Medical Technology. Requirements for these degrees are outlined in the section beginning on page 103.

ORGANIZATION OF THE SCHOOL

Departments. The School of Arts and Sciences comprises sixteen departments: Art, Biology, Chemistry and Physics, Classical Languages, English, Geography and Geology, History, Journalism, Mathematics, Modern Languages (French, German, Hebrew, Italian, Portuguese, Russian, Spanish), Music, Philosophy, Political Science, Psychology, Sociology and Anthropology, and Speech and Drama. Requirements for the majors and minors offered by these departments are listed in the section beginning on page 110.

Concentration groups. The various offerings of the sixteen departments of The School of Arts and Sciences are organized into three concentration groups:

HUMANITIES: art, English, French, German, Greek, history, Italian, journalism, Latin, mathematics, music, philosophy, psychology, Russian, Spanish, speech.

NATURAL SCIENCES: biology, chemistry, geology, physical geography, mathematics, physics

SOCIAL SCIENCES: anthropology, economics (administered by The School of Business Administration), geography (other than physical), history, philosophy, psychology, political science, sociology

Lower and Upper Divisions. The Lower Division comprises the freshman and sophomore years, the first four semesters of undergraduate work; courses in the lower division are numbered from 1000 through 2999. The Upper Division comprises the junior and senior years, the last four semesters of undergraduate work; courses offered in the Upper Division are numbered above 2999. Students who have completed the required number of hours and the required residence to be classified as juniors, but who have not completed their basic requirements in the Lower Division, must schedule these uncompleted requirements during the first semester in which such courses are available.

ADMISSION

All applicants for admission to The School of Arts and Sciences must meet the general University requirements listed in the section beginning on page 56. In addition, students who plan to become candidates for degrees in The School of Arts and Sciences must meet the following requirements:

Bachelor of Arts, Bachelor of Science, Bachelor of Science in Chemistry. In order to be admitted to the Lower Division of The Schools of Arts and Sciences as a candidate for one of the preceding degrees the student must have graduated from an approved high school with at least 15 units, divided as follows: English, at least 3 units; mathematics, at least 2 units; foreign language, at least 2 units in one language; the remainder to be chosen from other high school units, with not more than 3 from vocational subjects. It is strongly urged that the elective units be concentrated in the humanities, the natural sciences, and the social sciences. (If the student offers only one unit in mathematics, he may be admitted to the Lower Division, but will be required to complete successfully Mathematics 1181.)

Bachelor of Fine Arts, Bachelor of Music, and Bachelor of Science in the Medical Technology. In order to be admitted to the lower division of The School of Arts and Sciences as a candidate for one of the preceding degrees, the student must have graduated from an approved high school with at least 15 units, divided as follows: English, at least 3 units; mathematics, at least 2 units; the remainder to be chosen from other high school units, with not more than 4 from vocational subjects. It is strongly urged that the elective units be concentrated in the humanities, the natural sciences, and the social sciences. (If the student offers only one unit in mathematics, he may be admitted to the Lower Division, but will be required to complete successfully Mathematics 1181.)

RESIDENCE REQUIREMENTS

University residence requirements are explained in detail on page 88. A transfer student in The School of Arts and Sciences must be in residence at Memphis State University as a full-time student during his final semester before graduation and for at least one additional semester during his junior and senior years; he must earn at least 6 semester hours in residence in his major subject and at least 3 semester hours in his minor.

FOREIGN LANGUAGE REGULATIONS

1. A student who has completed one or more units in high school in one foreign language may not receive credit at Memphis State University for the corresponding semester or semesters in that language (one high school unit is the equivalent of one semester.) For example, if a student has completed one unit of French in high school, he may not receive credit for French 1101; if he

has completed four units of French in high school, he may not receive credit for French 1101, 1102, 2201, or 2202.

2. A student may not receive credit for anything less than *two* semesters (six semester hours) in beginning courses (1101, 1102) in one foreign language. For example, he will receive no credit, elective or otherwise, for French 1101 unless he completes French 1102 or a higher numbered course in French; if he begins his study with French 1102, he will receive no credit for the 1102 unless he completes French 2201 or a higher numbered course in French. Credit will be allowed for a single semester's work in courses numbered above 1999, and for single courses in Hebrew.

3. Foreign-born students may receive credit for courses in their mother tongue and its literature only (1) for courses taken in native institutions of college level, or (2) for upper-division courses taken at Memphis State University or in another English-speaking institution of approved standing.

4. Specific requirements in foreign languages for the degrees offered by The School of Arts and Sciences are as follows:

A. *BACHELOR OF ARTS*: three years (eighteen semester hours), or the equivalent, in one foreign language. (Greek 1101 and 1102 may be substituted for six semester hours of upper-division Latin; six semester hours of Latin may be substituted for six semester hours of upper-division Greek). If the student elects to continue the study of the same foreign language which he studied in high school, the following regulations apply:

- 1) If he had one unit of one foreign language in high school, he must complete 15 semester hours in courses numbered above 1101 in that language.
- 2) If he had two units of one foreign language in high school, he will fulfill the requirements with 12 semester hours in that language in courses numbered above 1999.
- 3) If he had three units of one foreign language in high school, he will fulfill the requirements with 9 semester hours in that language in courses numbered above 2201.
- 4) If he had four units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 2999.

B. *BACHELOR OF SCIENCE*: two years (twelve semester hours), or the equivalent, in one foreign language. If the student elects to continue the study of the same foreign language which he studied in high school, the following regulations apply:

- 1) If he had one unit of one foreign language in high school, he must complete 9 semester hours in courses numbered above 1101 in that language.
- 2) If he had two units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 1999.

- 3) If he had three units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 2201.
 - 4) If he had four units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 2999.
- C. *BACHELOR OF FINE ARTS, BACHELOR OF MUSIC, BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY:* one year (six semester hours) in one foreign language. If the student elects to continue the study of the same foreign language he studied in high school, the following regulations apply:
- 1) If he had one unit of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 1101.
 - 2) If he had two units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 1999.
 - 3) If he had three units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 2201.
 - 4) If he had four units of one foreign language in high school, he will fulfill the requirements with 6 semester hours in that language in courses numbered above 2999.
- D. *BACHELOR OF SCIENCE IN CHEMISTRY:* German 1101, 1102, 2201, and 2203.

PRE-PROFESSIONAL TRAINING

Standing committees of the faculty are available to advise students interested in preparing for careers in various professional areas; committee members, representing departments of the University in which pre-professional training is given, advise students concerning specific programs required by the various professional schools and furnish them with curriculum schedules showing the semester in which each of the required courses should be taken. A student who completes successfully six semesters of undergraduate work before entering an accredited professional school may, upon presentation of evidence of satisfactory completion of the first year of professional education, be granted a baccalaureate degree from Memphis State University provided that the requirements set forth in the pre-professional degree program described on page 89 are met. The advisory committees are as follows:

Pre-Medical (Professor Elmore Holmes, chairman). This committee advises students interested in careers in medicine, dentistry, nursing, pharmacy, optometry, veterinary medicine, medical technology, and related fields in the health sciences.

Pre-Law (Dean Robert D. Cox and Professor Erwin Clyde Buell, co-chairmen). In general, accredited law schools have not adopted specific requirements for pre-law education; they do, however, emphasize certain courses as being conducive to the development of the broad cultural background necessary for the successful study of law. Students enrolling in The School of Arts and Sciences for their pre-law training are encouraged to enter immediately one of the degree programs offered by the school.

Pre-Engineering (Professor Don Pearson Claypool, chairman). Students who plan to enter the engineering profession can complete one, two, or three years of pre-professional training at Memphis State University; this training is composed of the basic subjects required in most of the engineering options offered by the professional schools.

Pre-Social Work (Assistant Professor Charles Henderson, chairman). The student who wishes to prepare for admission to a graduate school of social work or who plans to go directly from college into a social work program will complete the requirements for the baccalaureate degree with a major in either sociology or psychology; specialized courses will be chosen in conference with the adviser.

TEACHER PREPARATION

Students enrolled in a degree program of The Schools of Arts and Sciences who wish to prepare themselves for teaching careers in the secondary schools of Tennessee may meet the state certification requirements while pursuing their chosen majors. Detailed certification requirements are outlined in the section beginning on page 89. Application to enter the program of teacher preparation must be made in the office of the dean of The School of Education.

REQUIREMENTS FOR THE DEGREES

BACHELOR OF ARTS

To qualify for the degree of Bachelor of Arts the student must complete a minimum of 132 semester hours with a quality point average of 2.0 (on a scale in which the grade of A has a quality point value of 4; B, 3; C, 2; and D, 1). Of the 132 semester hours required for graduation, at least 45 semester hours must be in courses from the Upper Division (those numbered above 2999). Not more than 42 semester hours in any one subject will be counted toward a degree. Not more than 18 semester hours (excluding

required physical education and AF-ROTC courses) may be taken outside The School of Arts and Sciences except for courses required for either (1) the minor or (2) teacher certification, but not both. Detailed requirements are as follows:

English 1101, 1102, 2101, 2102.

Foreign language: 18 semester hours, or the equivalent, in one foreign language; for details see page 100.

History 2601, 2602.

One semester of one natural science, and one two-semester sequence in a second natural science.

(Courses from which these must be selected are Biology 1200, 1600; Chemistry 1111, 1112; Geography 1101; Geology 1101, 1201, (not more than two semesters may be taken in geography and/or geology courses to meet this requirement); Physics 1111, 1112, or 2111, 2112, or 2511, 2512.

One semester of one social science, and one two-semester sequence in each of two other social sciences. (15 semester hours)

(Courses from which these must be selected are Anthropology 1100, 1200; Economics 2110, 2120; Geography 2301, 2311; History 1301, 1302; Political Science 2211, 2221; Psychology 1101, 1102; Sociology 1111, 2112.

Mathematics 1111, 1112; or 1211, 1212; or 1321, 2321; or Philosophy 1111, 1661.

Two of the following courses: Art 1101; Music 1131; Speech 1551. Air Force ROTC (for men): for details see page 87.

Physical Education: 2 to 4 semester hours; for details see page 87.

Completion of requirements for any major offered in The School of Arts and Sciences.

Completion of requirements for a minor in any subject (other than the major) offered by any department of the University.

Electives to bring the total to 132 semester hours.

BACHELOR OF SCIENCE

The Bachelor of Science degree may be awarded only to students majoring in one of the following disciplines: anthropology, biology, chemistry, geography, mathematics, physics, or psychology. Students majoring in anthropology, geography, or psychology (for the Bachelor of Science degree) must minor in either biology, chemistry, mathematics, or physics.

To qualify for the degree of Bachelor of Science the student must complete a minimum of 132 semester hours with a quality point average of 2.0 (on a scale in which the grade of A has a quality point value of 4; B, 3; C, 2; and D, 1). Of the 132 semester hours required for graduation at least 45 semester hours must be in courses from the Upper Division (those numbered above 2999). Not more than 18 semester hours (excluding required physical education and AF-ROTC courses) may be taken outside The School of Arts and Sciences except for courses required for either (1)

the minor, or (2) teacher certification, but not both. Detailed requirements are as follows:

English 1101, 1102, 2101, 2102.

Foreign language: 12 semester hours, or the equivalent in one foreign language; for details see page 100.

History 2601, 2602.

Biology 1200, 1600.

Mathematics 1111, 1112; 1211, 1212; or 1321, 2321.

One of the following two-semester sequences: Chemistry 1111, 1112; Geography 1101, Geology 1101; Geology 1101, 1201; Physics 2111, 2112; Physics 2511, 2512.

Two of the following two-semester sequences: Anthropology 1100, 1200; Economics 2110, 2120; Geography 2301, 2311; History 1301, 1302; Philosophy 1111, 1661; Political Science 2211, 2221; Psychology 1101, 1102; Sociology 1111, 2112.

Two of the following courses: Art 1101; Music 1131; Speech 1551.

Air Force ROTC (for men); for details see page 87.

Physical Education: 2 to 4 semester hours; for details see page 87.

Completion of the requirements for a major in one of the following disciplines: anthropology, biology, chemistry, geography, mathematics, physics, or psychology.

Completion of the requirements for a minor in any subject (other than the major) offered by any department in the University. EXCEPTION: Students majoring in anthropology, geography, or psychology (for a Bachelor of Science degree) must minor in either biology, chemistry, mathematics, or physics.

Electives to bring the total to 132 semester hours.

BACHELOR OF SCIENCE IN CHEMISTRY

To qualify for the degree of Bachelor of Science in Chemistry, the student must complete a minimum of 132 semester hours with a quality point average of 2.0 (on a scale in which the grade of A has a quality point value of 4; B, 3; C, 2; and D, 1). Of the 132 semester hours required for graduation, at least 45 semester hours must be in courses from the Upper Division (those numbered above 2999). Not more than 18 semester hours (excluding required physical education and AF-ROTC courses) may be in courses outside The School of Arts and Sciences except for courses required for teacher certification. Detailed requirements are as follows:

English 1101, 1102, 2101, 2102.

Foreign language: German 1101, 1102, 2201, and 2203.

History 2601, 2602.

Mathematics 1212, 1321, 2321, 2322.

Physics 2111, 2112 (by permission); or 2511, 2512.

Chemistry 1111, 1112, 2200, 3211, 3212, 3411, 3412, 4200, 4210, 4220, 4310, 4900, 4910.

One semester of one social science and one two-semester sequence in another social science. (Courses from which these must be selected are Anthropology 1100, 1200; Economics 2110, 2120; Geography

2301, 2311; Political Science 2211, 2221; Psychology 1101, 1102; Sociology 1111, 2112).

One of the following courses: Art 1101; Music 1131; Speech 1551.

Air Force ROTC (for men only); for details see page 87.

Physical education (2 or 4 semester hours); for details see page 87.

Completion of the requirements for a minor in biology, physics or mathematics.

Electives to bring the total to 132 semester hours.

BACHELOR OF FINE ARTS

The Bachelor of Fine Arts is a professional degree, the requirements for which provide the student with a greater opportunity for specialization in art than he has under the other baccalaureate programs; for this degree a total of 133 semester hours is required for graduation, 81 of which must be in art courses. A minimum grade of C is required in all art courses; the student must maintain an overall quality point average of 2.0 (on scale in which a grade of A has a quality point value of 4; B, 3; C, 2; and D, 1). The specific degree requirements are divided into five groups; (1) general education, (2) basic art courses, (3) courses in *one* of the four concentration areas; (4) elective courses in art; and (5) elective courses other than art (but within The School of Arts and Sciences) to bring the total to 133 semester hours.

(1) General education courses

English 1101, 1102, 2101, 2102

Foreign language: for details see page 100.

History 2601, 2602

One two-semester sequence course (six semester hours or more) in biology, chemistry, geology, mathematics, or physics

Air Force ROTC (for men only); for details see page 87

Physical Education (2 or 4 semester hours); for details see page 87

(2) Basic art courses

Art 1211 (Lettering)

Art 1311, 1314 (Drawing)

Art 1201, 1204, 2231, 2241 (Design)

Art 2101, 2102 (Sculpture)

Art 2351 (Graphics)

Art 4611 (Seminar)

Art History: 12 semester hours in upper-division art history courses

(3) Concentration area. Choose a, b, c, or d

a. Painting

Art 2321, 4321, 4322 (Drawing and Painting)

Art 3333 and 3334 (Casein)

Art 3331, 3332, 4331, 4332 (Oil)

- b. Graphic Techniques
 - Art 3351, 3352, 4351, and 4352 (Graphics)
 - Art 2321, 4321, 4322 (Drawing and Painting)
 - Art 3331, 3332 (Oil)
- c. Commercial Art
 - Art 3221, 3222, 4221, 4222 (Advertising Design)
 - Art 2213 (Lettering and Layout)
 - Art 3223 and 3541 (Package Design)
 - Art 4341 and 4322 (Illustration)
- d. Interior Design
 - Art 2311 (Perspective)
 - Art 3231, 3232, 4231, 4232 (Interior Design)
 - Art 3223 and 3541 (Packaging and Display)
 - Art 4233 and 4234 (Interior Rendering)

(4) Art electives: 6 semester hours

(5) Elective courses other than art (but within The School of Arts and Sciences) to complete the total of 133 semester hours. These courses will be chosen by the student in consultation with his adviser and the chairman of the Department of Art.

BACHELOR OF MUSIC

The Bachelor of Music is a professional degree, the requirements for which provide the student with a greater opportunity for specialization in music than he has under the other baccalaureate programs; as many as 92 of the 132 semester hours required for graduation may be in music. A minimum grade of C is required in all upper-division music courses; the student must maintain an over-all quality point average of 2.0 (on a scale in which a grade of A has a quality point value of 4; B, 3; C, 2; and D, 1). The specific degree requirements are divided into five groups: (1) general education, (2) basic music courses, (3) courses in *one* of six concentration areas, (4) music electives, and (5) elective courses other than music and music education to bring the total to 132 semester hours.

Detailed requirements are as follows; figures in parentheses indicate semester hours credit.

- (1) General education courses
 - English 1101, 1102, 2101, 2102 (12)
 - Foreign language: for details see page 100
 - History 1301, 1302, 2601, 2602 (12)
 - One two-semester sequence course (six semester hours or more) in biology, chemistry, geology, mathematics, or physics
 - Air Force ROTC (for men only); for details see page 87.
 - Physical Education (2 or 4); for details see page 87

- (2) Basic music courses
Music 1041, Introduction to Music (4)
Music Theory I and II (16)
Music 3031, Counterpoint (3)
Music 3033, Form and Analysis (3)
Music 3235, Choral Conducting (3)
Music 3131, 3132, History of Music (6)
Music ensembles (8)
Individual instruction in piano, organ, voice, or orchestral instrument (8)
Piano proficiency (see page 245 for details)
- (3) Concentration areas. Choose a, b, c, d, e, or f
- a. Instrumental music (piano, organ, string, or wind instrument)
Individual instruction in major instrument (8)
Recital
Music 3035, Instrumentation (3)
Small Ensembles and Chamber Music (4)
 - b. Voice
Individual instruction in voice (8)
Recital
Individual instruction in piano (4)
Small Ensembles (opera workshop, madrigal group, etc.) (4)
Music 3236, Conducting and Score Reading (3)
Foreign language, in addition to the six semester hours required in the general education group (12)
 - c. Music Theory and Composition
Music Education 1311, 1312, 1511, 1711, 1712, 1911, 1912
(Class instruction in brass, percussion, strings, and wood-winds) (7)
Music 3021 and 3022, Canon and Fugue (4)
Music 3023, 3024, 4021, 4022, Composition I and II (8)
Music 3035, Instrumentation (3)
Recital or thesis
 - d. Music History and Literature
Music 4131, Comparative Arts (3)
Music 4132, Modern Music (3)
Music 4133, The Opera and Music Drama (3)
Music 4134, Piano History, Literature, and Pedagogy (3)
Art 2101, 2102, World Art I and II (6)
Art 3161, 3162, Art in America I and II (6)
English 3411, World Literature I (3)
Foreign language, in addition to the six semester hours required in the general education group (6)
Recital or thesis
 - e. Music Education
Music 3035, Instrumentation (3)
Music 3236, Conducting and Score Reading (3)
Materials and methods: courses to be selected with adviser's approval (6-9)

Applied music to meet certification requirements
Courses in the Department of Curriculum and Instruction
to meet certification requirements (24)

Courses in general education to meet certification requirements (15)

Recital

f. Church Music

Music Education 1311, 1711, 1911, class instruction in brass,
string, and woodwind instruments (3)

Music 3035, Instrumentation (3)

Music 3236, Conducting and Score Reading (3)

Music 4135, 4136, Sacred Music I and II (6)

English 4461, Biblical Literature (3)

Two courses from the Department of Philosophy (6)

Recital or direction and public presentation of a cantata

- (4) Music electives: at least six semester hours in upper-division music courses selected from a concentration area other than the one chosen for the major.
- (5) Elective courses other than music and music education to bring the total to 132 semester hours. These courses will be chosen by the student in consultation with his adviser and the chairman of the Department of Music.

BACHELOR OF SCIENCE IN MEDICAL TECHNOLOGY

For students interested in careers in medical technology, The School of Arts and Sciences offers a three-year preparatory curriculum, the successful completion of which will qualify them to enter any accredited school of medical technology for clinical training which would result in eligibility for registry. Locally the University maintains an affiliation with the schools of medical technology of the Baptist Memorial Hospital and the Methodist Hospital, both of which are fully accredited. Should a student decide to enter either of these schools after completing successfully the preparatory curriculum, he may, after one year of clinical training and two additional courses in biochemistry (the lecture sessions only) taken on this campus, apply for the degree of Bachelor of Science in Medical Technology from this University; he would also, of course, be eligible for registry. A student who wishes to pursue this degree plan must file a degree program with the dean of The School of Arts and Sciences no later than the first semester of his sophomore year; he should confer with the chairman of either the Department of Biology or the Department of Chemistry and Physics concerning the choice of a major and a minor.

Specific requirements for the preparatory curriculum in medical technology (and the additional requirements for those working toward a baccalaureate degree) are as follows:

English 1101, 1102, 2101, 2102

Foreign language; see page 100 for details

History 2601, 2602

Psychology 1101

Psychology 1102 or Sociology 1111

Physics 2111 and 2112

Mathematics 1211; or Mathematics 1212

Biology 1210, 1610, 3410 (or 3730), 3800 (or 4620); the student working toward the baccalaureate degree will, in this third year, elect one additional upper-division biology course approved by the department chairman.

Chemistry 1111, 1112, 2000, 2010, 3211, 3212; the student working toward the baccalaureate degree will, in his fourth year, take Chemistry 4011 and 4012, lecture sessions only.

Air Force ROTC (for men only); see page 87 for details

Physical Education; see page 87 for details

Electives: 6 semester hours in the third year; the student working toward the baccalaureate degree will take an upper-division biology course to fulfill 3 semester hours of this requirement.

A curriculum schedule, showing the semester in which each of these courses should be taken, may be obtained from members of the Pre-Medical Advisory Committee.

IMPORTANT NOTE: The preparatory curriculum in medical technology does NOT qualify a student for the three-year pre-professional degree program described on page 89 of this catalog. Only those students who enroll in the schools of medical technology of the Baptist Memorial Hospital or the Methodist Hospital, both located in Memphis, can qualify for the degree of Bachelor of Science in Medical Technology from Memphis State University.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

Listed below are the specific course requirements for all majors and minors offered in The School of Arts and Sciences. A minimum grade of C is required in every course applicable toward a major or a minor (including corequisites), except in beginning courses and in sophomore English.

ANTHROPOLOGY (See SOCIOLOGY AND ANTHROPOLOGY)

ART (*The requirements listed below are for the major and minor in art for the Bachelor of Arts degree; for detailed requirements for the Bachelor of Fine Arts, a professional degree, see page 106*)

The Major: The Department of Art offers two majors, one in art history and one in art education; the requirements are as follows:

- a. Art History: 36 semester hours in art history courses, including Art 2101, 2102, 3161, 3162, and 4611, and 21 additional semester hours, 9 of which must be from the upper division.

- b. Art Education: 36 semester hours in art, including Art 1101, 1311, 1314, 1201, 1204, 3411, 3161, 3531, and 12 additional semester hours, 6 of which must be from the upper division.

The Minor: 24 semester hours in art courses, 9 of which must be from the upper division.

BIOLOGY

The Major: 36 semester hours in biology courses, 18 of which must be from the upper division; the student will elect *one* of the following areas of concentration and meet the specific requirements outlined below:

- a. Botany

Biology 1200, 1600, 3070, 3240, 3500

Biology electives (chosen in conference with the adviser) to bring the total semester hours in biology to 36, including one field course

Chemistry 1111 and 1112 or the equivalent

- b. Zoology

Biology 1200, 1600, 3070, 3610, 3620

Biology electives (chosen in conference with the adviser) to bring the total semester hours in biology to 36.

Chemistry 1111 and 1112 or the equivalent

The Minor: 18 semester hours in biology courses (including Biology 1200 and 1600), 7 of which must be from the upper division

CHEMISTRY AND PHYSICS: (*The requirements listed below are for majors and minors for the Bachelor of Arts or Bachelor of Science degrees; for detailed requirements for the Bachelor of Science in Chemistry, a professional degree, see page 105.*)

CHEMISTRY

The Major: 32 semester hours in chemistry courses, plus related courses, outlined below:

Chemistry 1111, 1112, 2200, 3211, 3212, and 12 additional semester hours in chemistry courses numbered above 2999. (Chemistry 2000 and 2010 may be substituted for Chemistry 2200.)

Mathematics 1212, 1321, 2321, 2322

Physics 2511, 2512 (or 2111, 2112 if approved by the chairman of the Department of Chemistry and Physics.)

The Minor: 20 semester hours in chemistry courses, including Chemistry 1111, 1112, 2200 (or a 4 semester-hour course from the upper division), 3211, 3212

PHYSICS

The Major: 32 semester hours in physics courses, including Physics 2511, 2512 (Physics 2111, 2112 are acceptable but not recommended) and additional upper-division physics courses to bring the total to 32 semester hours.

Chemistry 1112

Mathematics 2322 and 6 semester hours in mathematics courses numbered above 2322

The Minor: 20 semester hours in physics courses, including Physics 2511, 2512 (Physics 2111, 2112 are acceptable but not recommended), and additional upper-division physics courses to bring the total to 20 semester hours.

PHYSICAL SCIENCE

A major in physical science is suggested for those students who plan to teach the sciences in high school but do not desire to major in either chemistry or physics.

The Majors: 32 semester hours in chemistry and physics courses, including Chemistry 1111, 1112; Physics 2511, 2512 (or Physics 2111, 2112); and additional hours in chemistry and/or physics courses from the upper-division to bring the total to 32 semester hours.

The Minor: 20 semester hours in chemistry and/or physics courses, of which at least 8 semester hours must be from the upper-division.

CLASSICAL LANGUAGES

The Major in Latin: 12 semester hours in upper-division Latin courses

The Minor in Latin: 6 semester hours in upper-division Latin courses

ECONOMICS

The Major: 27 semester hours including Economics 2110, 2120, 3610, 4310, 4320, 4410; Management 3710 (or Mathematics 2611), and 6 additional semester hours in economics courses from the upper division as approved by the adviser.

The Minor: 18 semester hours in economics courses, including Economics 2110, 2120, 3610, 4310, and 6 additional semester hours from the upper division as approved by the adviser.

ENGLISH

The Major: 24 semester hours in upper-division English courses, including hours as specified from each of the following groups, each student's program to be arranged so as to provide the greatest possible chronological scope:

- I. Language (3): English 3501.
- II. American Literature (3): English 3321 or 3322.
- III. English Literature
 - A. (3): English 3211, 3212, 3213, or 3214.
 - B. (3): English 3221, 3222, 3223, or 3224.
- IV. Major Authors (3): English 4231 or 4234.
- V. Shakespeare (3): English 4232 or 4233.
- VI. Genre (3): English 3341, 3342, 4241, 4242, 4251, 4252, or 4351.
- VII. One additional upper-division English course (3), selection to be made with approval of adviser in light of choices made from first six groups.

NOTE: Students who wish to satisfy the requirements for both the English major and for certification to teach English in high school within the minimum of 24 hours must choose English 3321 from Group II; English 3214 from Group III A; English 3221, 3222, or 3223 from Group III B; and English 3322 from Group VII.

The Minor: 15 semester hours in upper-division English courses, including hours as specified from each of the following groups:

- I. Language (3): English 3501.
- II. American Literature (3): English 3321 or 3322.
- III. English Literature (3): English 3214, 3221, 3223, or 3224.
- IV. Shakespeare (3): English 4232 or 4233.
- V. One additional upper-division English course (except one from the century chosen in the Group III option) (3).

FRENCH (*See MODERN LANGUAGES*)

GEOGRAPHY

The Major: 30 semester hours in geography courses, including Geography 1101, 1102, 1201, 1211, 2301, 2311, and 12 additional semester hours from the upper division.

The Minor: 24 semester hours in geography courses, including Geography 1101, 1102, 1201, 1211, 2301, 2311, and 6 additional semester hours from the upper division.

GERMAN (*See MODERN LANGUAGES*)

HISTORY

The Major: 30 semester hours in history courses, including History 1301, 1302, 2601, 2602, and 18 additional semester hours from the upper division with a minimum of 6 semester hours in European history and 6 semester hours in American history.

The Minor: 24 semester hours in history courses, including History 1301, 1302, 2601, 2602, and 12 additional semester hours from the upper division.

JOURNALISM

The Major: The Department of Journalism offers a choice of three majors: news-editorial, advertising, and radio-television journalism; the requirements are as follows:

- a. News-editorial: 30 semester hours in journalism courses, including Journalism 1011, 1012, 2111, 2112, 3112, 3114, 4222, and 9 additional semester hours from the upper division.
- b. Advertising: 30 semester hours in journalism and related courses, including
Journalism 1011, 1012, 2211, 3221, 3222, 4221, 4222
Marketing 3010
Art 3221
One of the following courses: Art 3222, 3223, 4221;
Marketing 3140, 3150, 3160
- c. Radio-television journalism: 30 semester hours in journalism and related courses, including
Journalism 1011, 1012, 2111, 2112, 3221, 3331, 3332,
3333
Marketing 4120
Speech 3841

All journalism majors must work the equivalent of two semesters on *The Tiger Rag*, the weekly newspaper, on *The DeSoto*, University yearbook; or in the office of the University Public Information Office. Semester hours credit for this work, whenever it is done, will not be granted until the student's senior year.

The Minor: 18 semester hours in journalism courses, including Journalism 1011, 1012, 2111, and 9 additional semester hours, 6 of which must be from the upper division.

LATIN (*See Classical Languages*)

MATHEMATICS

The Major: A minimum of 33 semester hours in mathematics courses including Mathematics 1321, 2321, 2322, 3111, 3112, and 12 additional semester hours from the upper division. Chemistry 1111 and 1112; or Physics 2111 and 2112; or Physics 2511 and 2512.

The Minor: 18 semester hours in mathematics courses, including either Mathematics 1321, 2321, 2322, or 6 semester hours from the upper division.

MODERN LANGUAGES: The Department of Modern Languages offers majors and minors in French, German, and Spanish.

Requirements for the majors and minors are as follows:

FRENCH

The Major: 18 semester hours in upper-division French courses, including French 3411 and 3412.

The Minor: 12 semester hours in upper-division French courses.

GERMAN

The Major: 18 semester hours in upper-division German courses, including German 3411 and 3412.

The Minor: 12 semester hours in upper-division German courses.

SPANISH

The Major: 18 semester hours in upper-division Spanish courses, including Spanish 3411, 3412, 3511, and 3512.

The Minor: 12 semester hours in upper-division Spanish courses.

MUSIC. The requirements listed below are for the major and minor in music for the Bachelor of Arts degree; for detailed requirements of the Bachelor of Music, a professional degree, see page 107

For requirements for the major and minor in music education, see page 140. For details of piano proficiency requirements, see page 245

The Major: 39 semester hours in basic music courses plus the completion of the requirements for one concentration area; specific courses are outlined below:

- a. Basic music courses (39 semester hours)

Music 1041; 1032 (and 1012), 1033 (and 1013), 2034 (and 2014), 2035 (and 2015); 3031, 3033, 3035 (or 3235); 3131, 3132; and 4 semester hours of individual instruction in piano, organ, voice, or orchestral instrument.

- b. Concentration areas (choose one)

1. Applied Music (4 semester hours)

4 semester hours of individual instruction in upper-division courses
Recital

2. Music Theory and Composition (8 semester hours)
Music 3021, 3022, 3023, and 3024
3. Music History and Literature (9 semester hours)
Three of the following courses: Music 4131, 4132, 4133, 4134
4. Church Music (9 semester hours)
Music 3236, 4135, 4136

The Minor: 22 semester hours in basic music courses plus the completion of the requirements for *one* concentration area; specific courses are outlined below:

- a. Basic music courses (22 semester hours)
Music 1041 ; 1032 (and 1012), 1033 (and 1013) ; 3131, 3132; and 4 semester hours of individual instruction in piano, organ, voice, or orchestral instrument.
- b. Concentration areas (choose one)
 1. Applied Music (4 semester hours)
4 semester hours of individual instruction in upper-division courses
 2. Music History and Literature (6 semester hours)
Two of the following courses: Music 4131, 4132, 4133, 4134
 3. Church Music (9 semester hours) Music 3235, 3236, 4135 (*or* 4136)

PHILOSOPHY

The Major: 30 semester hours in philosophy courses, including Philosophy 1111 (or 1221), 1611, 2211, 2311, 2411 (or 2511), and 15 additional semester hours, at least 9 of which must be from the upper division.

The Minor: 21 semester hours in philosophy courses, including Philosophy 1111, 1611, and 15 additional semester hours, at least 6 of which must be from the upper division.

PHYSICAL SCIENCE: (*See CHEMISTRY AND PHYSICS*)

PHYSICS: (*See CHEMISTRY AND PHYSICS*)

POLITICAL SCIENCE

The Major: 30 semester hours in political science courses, including Political Science 1101, 1301, 2211, 2221, and 18 additional semester hours from the upper division.

The Minor: 18 semester hours in political science courses, including Political Science 1101, 1301, 2211, 2221, and at least 6 additional semester hours from the upper division.

PSYCHOLOGY

The Major: 25 semester hours in psychology courses, including Psychology 1101, 1102, 2301, 3201, 3202, and 9 additional semester hours, at least 6 of which must be from the upper division.

The Minor: 18 semester hours in psychology courses, at least 6 semester hours of which must be from the upper division.

SOCIOLOGY AND ANTHROPOLOGY**SOCIOLOGY**

The Major: 30 semester hours in sociology courses, including Sociology 1111, 2112, 3311, 4211, and 18 additional semester hours, at least 15 of which must be from the upper division. No more than three semester hours toward a major will be accepted from the social-work courses, Sociology 2911, 3912, 3913.

The Minor: The department offers a choice of two minors, one in sociology and one in industrial sociology; the requirements are as follows:

- a. *Sociology:* 18 semester hours in sociology courses, including Sociology 1111, and 15 additional semester hours from the upper division.
- b. *Industrial Sociology:* 18 semester hours in sociology courses, including Sociology 1111, 3320, 3841, 4842, 4843, and 3 additional semester hours from the upper division.

ANTHROPOLOGY

The Major: 24 semester hours in anthropology courses, including Anthropology 1100, 1200, and 4254, and 15 additional semester hours, at least 12 of which must be from the upper division.

The Minor: 18 semester hours in anthropology courses, including Anthropology 1100 and 1200.

SPANISH: (See MODERN LANGUAGES)

SPEECH AND DRAMA: The Department of Speech and Drama offers majors in general speech, rhetoric and public address, radio and television, speech pathology, audiology, and theatre and oral interpretation. Majors are encouraged to participate in the activities of the department.

The Majors:

General Speech: 30 semester hours in speech courses, including Speech 1211, 1311 (or 2311), 1411, 1551, 2321, 2511 or 2521 or 2531, 3301 or 3401 or 3501 (two semesters), and 10 additional semester hours from the upper division.

Rhetoric and Public Address: 32 semester hours in speech courses including Speech 1211, 1311 (or 2311), 1411, 2321, 3301 (two semesters), 3341, and 15 additional semester hours chosen from the following: Speech 2331, 3311, 3321, 3841, 3842, 4351, 4361, 4362, 4363, 4364, 4371.

Radio and Television: 32 semester hours in speech courses, including Speech 1311 (or 1211), 1411, 2811, 2821, 2831, 3801 (two semesters), 3841, and 12 additional hours from the following courses: 3561, 3842, 3851, 3861, 4511, 4841, 4871.

Speech Pathology: 36 semester hours in speech courses including Speech 1311 (or 1211), 1411 (or 2531), 2611, 2621, 2631, 3641, 3651, 3661, 3631 (or 3681), 4601, 4602, 4671.

Audiology: 36 semester hours in speech courses including Speech 1311 (or 1211), 1411 (or 2531), 2611, 2621, 2631, 3631, 3641, 3681, 4601, 4602, 4631, 4632.

Theatre and Oral Interpretation: 32 semester hours in speech courses, including Speech 1211, 1311 (or 2311), 1411, 1551, 2511, 2521 (or 2531), 3401 or 3501 (two semesters), and 12 additional semester hours chosen from the following: Speech 2411, 2541, 3451, 3521, 3531, 3551, 3552, 3561, 3841, 3842, 4421, 4431, 4441, 4511, 4551, 4561, 4571, 4581, 4921.

The Minor: 19 semester hours in speech courses, including Speech 1211, 1311, 1411, 2321, 2511, 3301 or 3401 or 3501, and 3 additional hours from the upper division.

Speech minor for Business Administration majors: 18 semester hours in speech courses, including Speech 1011, 1211, 2331, 3011, 3341, 4351.

Speech minor in Oral Interpretation: 18 semester hours in speech courses, including Speech 1211, 1411, 2411, 4421 (or 4431), and six hours chosen from the following: 3451, 3551, 3552, 4441, 4551, 4581.

THE SCHOOL OF BUSINESS ADMINISTRATION

HERBERT JOHN MARKLE, B.B.A., M.A., Ph.D., *Dean*
Room 100, The School of Business Administration Building

THE function of The School of Business Administration is to provide the basic education necessary to prepare a person to enter the profession of business. A significant characteristic of the school is that it provides for concentration in the basic areas of economics and business, not as a substitute for, but as a part of a broad liberal education. From forty to sixty per cent of the course work taken for the Bachelor of Business Administration degree is taken in such areas as the humanities, the natural and physical sciences, and the social sciences.

AREAS OF PROFESSIONAL TRAINING

The School of Business Administration offers a wide selection of general and specialized fields, each of which has programs designed to prepare students for a variety of careers:

Careers in Accountancy: Accounting is a vital activity in any business. The increased complexity of financial records resulting from federal regulations and the expanded use of automation necessitates a highly technical background for persons who prepare financial reports. The Department of Accountancy offers preparation in governmental, industrial, and public accounting. It administers the testing program of The American Institute of Certified Public Accountants, the national scope of which enables students to check their individual ratings with national averages. Graduates with a major in accounting are qualified to take the Certified Public Accountants' examination in Tennessee; students desiring a career in public accounting are encouraged to intern with a public accounting firm in their senior year.

Careers in Business Research: With a Bureau of Business Research operating as a function of The School of Business Administration, practical experience can be gained by those who wish to specialize in this fascinating and rapidly developing area of administration. The demand for researchers by industry is mounting by leaps and bounds. In addition, those majoring in other areas,

may gain some introduction to the techniques and abilities of the research function.

Careers in Economics and Finance: A sound understanding of our economic system is a must for today's businessman. In addition, business employs the professional economist for forecasting and explaining the effect of changing economic variables. Many economists are employed by government for comparable reasons. Training in economics is designed to increase awareness of economic problems and encourage the students to analyze alternative solutions for himself.

Courses in finance are designed to prepare the student for careers in financial institutions, and the finance departments of business. Governmental finance broadens the student's understanding of important national and international problems and encourages the consideration of alternative solutions.

Careers in Management: The decisions of management in business are more and more being recognized as having broad implications extending beyond the individual firm. In recognition of this, the Department of Management offers the broad preparation necessary for future managers, with specialization in a number of important areas.

Careers in Marketing: The Department of Marketing provides training for those interested in the growing field of distribution. The young person possessed of energy, ability, and the competitive urge will discover that training and development in marketing skills opens many opportunities in serving the public as well as material reward. Training will prepare for occupations in the field of retailing, advertising, purchasing, wholesaling, industrial marketing, sales management, or marketing research. Students have the opportunity to gain valuable work-experience during the senior year in their specific major in marketing.

Careers as Professional Secretaries: The value of a secretary, either man or woman, with a university degree is receiving increasing recognition by business executives; the same thing is true in the field of office management. Thorough training in both fields is provided by the Department of Secretarial Science and Office Management.

Careers in Business Education: Preparing students to teach business subjects in the secondary schools is an important function of The School of Business Administration. A student with a major in any one of the five departments of the school may qualify for a

high school teaching certificate; he will minor in education and complete the certification requirements outlined on page 92. The chairman of the Department of Secretarial Science and Office Management serves as adviser to all students in the School of Business Administration preparing for a career in business education.

THE PRE-LAW CURRICULUM

A student enrolled in The School of Business Administration who wishes to prepare himself for entrance to law school may qualify for the Bachelor of Business Administration degree by completing all the requirements of the pre-professional degree program outlined on page 89 and by completing successfully one year at a law school of an accredited university. He must (1) meet all the lower-division requirements of The School of Business Administration as outlined on page 122; (2) complete the required core courses in the upper division as outlined on page 123 (with the omissions as explained on that page); (3) select a major in either accountancy, economics, or management and meet the requirements listed in the section beginning on page 125; (4) select a minor in one of the other foregoing departments or some other department in the University, and meet the requirements as determined by the chairman of the department concerned; and (5) complete a minimum of 99 semester hours overall before entering law school. All upper-division courses taken in fulfillment of this program must be approved by the chairman of the department in which the student is majoring. Students frequently prefer to get the bachelor's degree before entering law school. In that case, any major in The School of Business Administration may be selected, and the regular program for that major, as outlined in the catalog, should be followed.

ORGANIZATIONS OF THE SCHOOL

The School of Business Administration comprises five departments: Accountancy, Economics and Finance, Management, Marketing, and Secretarial Science and Office Management. These departments offer a variety of majors and minors, the detailed requirements for which are listed in the section beginning on page 125.

The Bureau of Business Research, sponsored by the governments of the City of Memphis and Shelby County, operates as a separate function of the school. A trained and experienced staff of researchers, under a director, operates the Bureau.

The school is organized into a lower division and an upper division:

THE LOWER DIVISION comprises the freshman and sophomore years, the first four semesters of university work. Courses offered in the lower division are numbered from 1000 through 2999 and the student must register consistently for all lower division requirements until they are completed.

THE UPPER DIVISION comprises the junior and senior years, the last four semesters of undergraduate work; courses offered in the upper division are numbered from 3000 through 4999.

Courses in the 5000 series are open to seniors within 36 hours of graduation.

LABORATORY FACILITIES

The School of Business Administration provides thirteen laboratories for development of facility in business: five accounting laboratories with individual tables for students; six secretarial laboratories, four for typewriting and two for general secretarial and office practice; one laboratory for statistics, equipped with adding machines and calculators; and laboratory work on electronic data computers. In addition the facilities of the Bureau of Business Research are available for research laboratory training.

ADMISSION

The requirements for admission to The School of Business Administration are those set up for the University as a whole; see page 56.

A student who has attended another accredited college or university, or who has received correspondence and/or extension credit from such an institution, will be given credit for all acceptable residence work and for a maximum of 33 semester hours in acceptable correspondence and/or extension work. To be acceptable, a course must be approved by the Committee on Admissions and the quality point average must meet the minimum standards set by the University; see page 82 for details.

RESIDENCE REQUIREMENTS

A transfer student must be in residence at Memphis State University during his final semester before graduation and for at

least one additional semester during his junior and senior years. He must take a minimum of 15 semester hours of work in the School of Business Administration, of which 9 or more must be in his major field. He must complete 6 or more semester hours in his minor. If the minor is in The School of Business Administration, the 6 hours may be a part of the required 15. Adjustments in major requirements may be made where feasible, but only with the approval of the Dean of The School of Business Administration.

University residence requirements are explained in detail on page 88.

DEGREE REQUIREMENTS

The School of Business Administration offers the degree of Bachelor of Business Administration. To qualify for this degree the student must complete 132 semester hours with a quality point average of 2.0 (on a scale where A gives 4 quality points; B, 3; C, 2; and D, 1). Of the 132 semester hours required for graduation, at least 48 must be in courses from the upper division (those numbered above 2999). A grade of C or better must be earned in every upper-division course applied toward satisfaction of the specific major and minor.

General requirements for the degree include the successful completion of (I) required courses in the lower division; (II) required courses in the upper division; (III) requirements for a major in The School of Business Administration; and (IV) requirements for a minor in either The School of Business Administration or another school of the University. Required courses cannot be dropped except under very special conditions. Requirements are outlined in detail in the sections which follow.

I. REQUIRED COURSES IN THE LOWER DIVISION

(Figures in parentheses indicate semester hours credit. One-semester courses may be taken either semester.)

First Semester

- English 1101 (3)
- Speech 1011 (3)
- A biological or physical science (3)
- Management 1010 (3)
- Physical Education (1)
- Air Force ROTC 1111
(for men) (1)
- An elective course (3)

Second Semester

- English 1102 (3)
- Mathematics 1291 or higher (3)
- A biological or physical science (3)
- Psychology 1101 (3)
- Physical Education (1)
- Air Force ROTC 1112
(for men) (2)
- An elective course (3)

NOTES:

- a. The student who expects to major in accountancy may, with permission of his adviser enroll in Accounting 2010 and 2020 in his freshman year, taking Accounting 2720 (Laboratory) along with Accounting 2020.
- b. Typewriting ability is a basic requirement. Every student will enroll in a typewriting class during his first semester in The School of Business Administration or arrange to take a proficiency examination. If he fails the proficiency examination, he must enroll in a typewriting class the following semester; he must pass either the typewriting course or the test before he arrives at junior classification.
- c. The science requirement must be met by a two-semester sequence course.
- d. Air Force ROTC is required of all men except those excused by the Professor of Aerospace Studies; for detail see page 87.

Third Semester

Accounting 2010 (3)
 English 2101 (3)
 History 2601 (3)
 Economics 2110 (3)
 Physical Education (1)
 Air Force ROTC 2211
 (for men) (2)
 An elective course (3)

Fourth Semester

Accounting 2020 (3)
 English 2102 (3)
 History 2602 (3)
 Economics 2120 (3)
 Physical Education (1)
 Air Force ROTC 2212
 (for men) (1)
 An elective course (3)

NOTES:

- a. Accounting 3110 and 3120 may be taken by the student with credit in Accounting 2020.
- b. The student planning to major in secretarial science may start shorthand in the sophomore year.
- c. Men taking Air Force ROTC 2211 and 2212 may be excused from two semesters of Physical Education.
- d. If a student has credit in Accounting 2020 and Economics 2110, he may enroll in Management 3410 during his fourth semester.
- e. Marketing 3010 should be taken in the fourth semester by marketing majors and by all others who can fit it into their schedules (and who have completed Economics 2110).

II. REQUIRED CORE COURSES IN THE UPPER DIVISION

Every student enrolled for the degree of Bachelor of Business Administration with the exceptions noted below, must complete successfully the following six courses:

Economics 3610, Money and Banking I (3)
 Management 3010 and 3020, Business Law (6)
 Management 3410, Business Organization (3)
 Management 3710, Business Statistics (3)
 Marketing 3010, Principles of Marketing (3)

NOTES:

- a. Students enrolled in the three-year pre-law curriculum will omit Management 3010 and 3020 and Marketing 3010.
- b. Majors in secretarial science will take Management 3010 and 3020 and two additional courses from the above list (12 semester hours).

III. THE MAJOR

With the assistance of his adviser, each student, not later than the beginning of his junior year, will select from the list below an area of specialization, called the major. After selecting his major the student will report to the dean of The School of Business Administration for assignment to a major professor in the department in which the major is offered. Listed below are the five departments of The School of Business Administration and the areas of specialization offered in each; the specific courses required by each department for the satisfaction of its majors are listed in the section beginning on page 125.

DEPARTMENT OF ACCOUNTANCY

Governmental accounting
Industrial accounting
Pre-law curriculum
Public accounting

DEPARTMENT OF ECONOMICS AND FINANCE

Banking
Business finance
Economic analysis and research
Economic theory
Government finance
Investments
Pre-law curriculum

DEPARTMENT OF MANAGEMENT

Business research
General business management
Industrial management
Insurance
Personnel administration and industrial relations
Pre-law curriculum
Real estate
Transportation

DEPARTMENT OF MARKETING

Advertising
Physical distribution
Retail management
Sales management
Wholesale-industrial marketing

DEPARTMENT OF SECRETARIAL SCIENCE AND OFFICE

MANAGEMENT
Office management
Secretarial science

IV. THE MINOR

To broaden his background every student is required to complete sufficient work in an area other than his major to evidence some degree of specialization in that area. Two options are available:

a. The minor in The School of Business Administration

If the student elects a minor from The School of Business Administration, he must choose one from a department other than the one in which his major is offered. The minor program must be approved by the chairman of the minor department early in the student's junior year; it must include a minimum of 9 semester hours of courses from the upper division. (A student whose major is in another school of the University and who wishes a minor in The School of Business Administration may choose a minor from any department; the requirements are listed, by departments, below. A general minor in business administration is not available.)

b. The minor in another school of the University

The student whose major is in The School of Business Administration may complete a minor in any one department of any school of the University, provided that such a minor consist of a minimum of 18 semester hours, at least 6 semester hours of which must be in courses from the upper division (numbered above 2999).

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

DEPARTMENT OF ACCOUNTANCY: The objective of the Department of Accountancy is to provide the graduate with a substantial background in accountancy which will enable him to adjust himself to any accounting situation and to advance rapidly in government, industry, or public accounting practice. The curriculum is designed to enable the student to achieve mastery of the generally accepted accounting principles and procedures as they are applied in all fields of accounting and to study modern accounting trends and techniques and the current controversial topics in his profession.

Specialization is provided in (1) governmental accounting, (2) industrial accounting, and (3) public accounting.

The Major: Accounting 2720 (Laboratory) and a minimum of 27 semester hours in upper-division accounting courses, as follows:

3110 and 3120, Intermediate Accounting I and II

3310 and 3320, Cost Accounting I and II

4210, Advanced Accounting I

4510, Federal Income Tax I

3240, Internal Auditing (if the specialization is industrial accounting)

or

4240, Auditing I (if specialization is public accounting)

Two additional upper-division accounting courses, approved by the department chairman

The Three-Year Pre-Law Major (see page 120)

Accounting 3110 and 3120, Intermediate Accounting I and II

Accounting 3310, Cost Accounting I

Three additional accounting courses selected from the following:

Accounting 3320, 4210, 4220, 4240, 4250, 4450, 4460, 4510, 4520, 4540

The Minor: A minimum of 19 semester hours in accounting courses, as follows:

2010 and 2020, Fundamentals of Accounting

2720, Accounting Laboratory

3110, Intermediate Accounting I

3310, Cost Accounting I

Two additional upper-division accounting courses, approved by the department chairman

DEPARTMENT OF ECONOMICS AND FINANCE

The Major in Economics (THE SCHOOL OF BUSINESS ADMINISTRATION): a minimum of 21 semester hours in upper-division courses, as follows:

3110, Economics of Business Enterprise

3210, Labor Economics

4310, Economic Theory I

A minimum of 12 semester hours in courses related to one of the following areas, selected with the approval of the major professor:

- Economic analysis and research
- Economic theory

The Major in Economics (THE SCHOOL OF ARTS AND SCIENCES): the student will be required to meet the requirements for the Bachelor of Arts degree plus the specific major requirements:

- 2110, 2120, Principles of Economics I and II
- 3610, Money and Banking I
- 4310, Economic Theory I
- 4320, National Income Analysis and Fiscal Policy
- 4410, Development of Economic Thought
- Management 3710 or Mathematics 2611, Statistics
- Two additional approved upper-division courses, for a total of 27 semester hours.

The Three-Year Pre-Law Major (see page 120)

Six economics courses selected from the following:

- Economics 3110, 3210, 3330, 3710, 4130, 4310, 4320, 4350, 4610, 4720

The Major in Finance: a minimum of 21 semester hours in upper-division economics courses, as follows:

- 4130, Government Regulation and Business Policy
- 4610, Money and Banking II
- 4720, Public Finance

A minimum of 12 semester hours in courses related to one of the following areas, selected with the approval of the major professor:

- Banking
- Business finance
- Government finance
- Investments

The Minor:

a. For students whose Major is within The School of Business Administration: three approved upper-division courses in economics or finance, exclusive of the basic upper-division requirements for the Bachelor of Business Administration degree.

b. For students whose major is in another school of the University:

ECONOMICS MINOR: Economics 2110 and 2120, Principles of Economics I and II

- Economics 3610, Money and Banking I
- Economics 4310, Economic Theory I
- Two additional approved upper-division courses

FINANCE MINOR: Accounting 2010 and 2020, Fundamentals of Accounting

- Economics 2110 and 2120, Principles of Economics I and II

Economics 3610, Money and Banking I

Management 3410, Business Organization

Two additional approved upper-division courses

DEPARTMENT OF MANAGEMENT

The Major: a minimum of 21 semester hours in upper-division courses, as follows:

Economics 3110, Economics of Business Enterprise

Economics 3210, Labor Economics

Management 4610, Corporation Finance

or

Management 4410, Management of Business Enterprise

A minimum of 12 semester hours in courses related to one of the following areas, selected with the approval of the major professor:

Business research

General business management

Industrial management

Insurance

Personnel administration and industrial relations

Real estate

Transportation

The Three-Year Pre-Law Major (see page 120)

Six management courses selected from the following:

Management 3220, 3310, 3510, 3810, 4220, 4310, 4320, 4410, 4610, 5010, 5020

The Minor:

a. For the student whose major is within The School of Business Administration: three approved upper-division courses in management, exclusive of the basic upper-division requirements for the Bachelor of Business Administration degree.

b. For the student whose major is in another school of the University:
Accounting 2010 and 2020, Fundamentals of Accounting
Economics 2110 and 2120, Principles of Economics I and II
Economics 3610, Money and Banking I
Management 3410, Business Organization

Two additional approved upper-division courses in Management.

DEPARTMENT OF MARKETING: The objective of the Department of Marketing is to provide the student with a broad concept of the marketing process and to develop an understanding of all the factors involved in the collection and distribution of goods and services.

The Major: a minimum of 24 semester hours in upper-division marketing courses, as follows:

3140, Principles of Advertising

3320, Principles of Retailing

3410, Salesmanship

4010 Marketing Administration

A minimum of 12 semester hours (15 semester hours for Sales) in upper-division courses applicable to the specific major; the specific major and the applicable courses will be selected in conference with the adviser, from the following:

- 1) **ADVERTISING:** designed to provide an understanding of mass communication media, advertising agencies, retail advertising departments, advertising management, and other advertising activities. A minimum of four courses will be chosen from the following:

3110, Advertising Copy Writing
3120, Advertising Design I
3130, Advertising Design II
3150, Advanced Advertising
3160, Advertising Law and Business Ethics
4080, Marketing Research
4110, Industrial Advertising
4120, Television and Radio Advertising
4130, Retail Advertising, Display and Promotion
4140, Advertising Agency Management
4991, Work Experience in Advertising

- 2) **PHYSICAL DISTRIBUTION:** this major covers efficient acquisition and movement of products at all levels including purchasing and transportation. A minimum of four courses will be chosen from the following:

4080, Marketing Research
4210, Physical Distribution
4220, Purchasing
4230, Distribution Logistics
4510, Wholesale-Industrial Marketing
4992, Work Experience in Physical Distribution Management
4540, Time and Motion Analysis
Accounting 3310, Cost Accounting I
Accounting 3320, Cost Accounting II
Economics 3510, Transportation
Secretarial Science 4410, Office Management

- 3) **RETAIL MANAGEMENT:** this major gives the student a background in the operation and management of a retail establishment. A minimum of four courses will be chosen from the following:

3310, Textiles
3330, Buying and Pricing
4080, Marketing Research
4130, Retail Advertising, Display and Promotion
4310, Home Furnishing and Equipment
4320, Retail Policies and Problems
4330, Credit and Collections
4993, Work Experience in Retail Management

- 4) **SALES:** this major gives the student a thorough grounding in the techniques of making sales presentations effectively and prepares him to enter the field of sales management. A minimum of five courses will be chosen from the following:

- 3420, Sales Theory and Technique
- 3430, Sales Promotion
- 4080, Marketing Research
- 4220, Purchasing
- 4330, Credit and Collections
- 4410, Sales Management
- 4420, Sales Supervision and Training
- 4510, Wholesale-Industrial Marketing
- 4994, Work Experience in Sales

- 5) **WHOLESALE-INDUSTRIAL MARKETING:** this major presents a broad view of distribution and procurement of goods and services at wholesale and industrial levels, including agricultural products. A minimum of four courses will be chosen from the following:

- 3510, Marketing Farm Products
- 4080, Marketing Research
- 4410, Sales Management
- 4510, Wholesale-Industrial Marketing
- 4520, Product Planning
- 4530, International Marketing
- 4540, Cotton Marketing
- 4995, Work Experience in Wholesale-Industrial Marketing

Industrial Arts 3411, Engineering Materials

The Minor:

- a. For the student whose major is within The School of Business Administration: three approved upper-division courses in marketing, exclusive of the basic upper-division requirements for the Bachelor of Business Administration degree.
- b. For the student whose major is in another school of the University:
Accounting 2010 and 2020, Fundamentals of Accounting
Economics 2110 and 2120, Principles of Economics I and II
Marketing 3010, Principles of Marketing
Three additional upper-division marketing courses approved by the department chairman

DEPARTMENT OF SECRETARIAL SCIENCE AND OFFICE MANAGEMENT

The student planning to major in either secretarial science or office management will take in his freshman year Secretarial Science 1210 and 1220, Elementary Typewriting I and II. If he has had previous training in typewriting, he may, with the approval of his adviser, omit 1210 and take 1220 and a higher-numbered typewriting course, or one semester of an elective.

The student planning to major in secretarial science will take, in his sophomore year, Secretarial Science 2120 and 2130, Fundamentals of Shorthand I and II. If he has had previous training in shorthand, he may, with the approval of his adviser, omit

2120 and take 2130 and a higher-numbered shorthand course, or one semester of an elective. Students planning to major in office management may omit shorthand from their programs.

NOTE: No more than 3 courses (9 semester hours) in typewriting may be applied toward satisfaction of the degree requirements by a student with high school credit in typewriting.

The Major in Secretarial Science: a minimum of 24 semester hours of upper-division secretarial science courses, as follows:

3140, Advanced Shorthand I
3250, Advanced Typewriting
3510, Business Report Writing
3520, Business Letter Writing
3310, Secretarial Office Machines
4320, Applied Secretarial Practice
4410, Office Management I

One of the following courses, selected in conference with the adviser:

3150, Advanced Shorthand II
4260, Secretarial Typewriting
4330, Applied Secretarial Practice II
4160, Secretarial Dictation
4530, Executive Communication
5420, Office Management II

The Major in Office Management: a minimum of 24 semester hours of upper-division courses as follows:

3510, Business Report Writing
3520, Business Letter Writing
3310, Secretarial Office Machines
4410, Office Management I
Accounting 3210, Financial Statement Analysis
Economics 3110, Economics of Business Enterprise

One of the following courses, selected in conference with the adviser:

4530, Executive Communication
5420, Office Management II
Management 4210, Personnel Administration
Management 4610, Corporation Finance
Management 4410, Management of Business Enterprise
Marketing 4330, Credit and Collections

The Minor in Secretarial Science:

- a. For the student whose major is within The School of Business Administration: one course (above the beginning courses) in shorthand; one course (above the beginning course) in typewriting; and two additional upper-division courses in secretarial science approved by the department chairman.

- b. For the student whose major is in another school of the University:
1210 and 1220, Elementary Typewriting I and II
2120 and 2130, Fundamentals of Shorthand I and II
3140, Advanced Shorthand I
Two or three additional approved upper-division courses in secretarial science.

(If the student can demonstrate proficiency in either typewriting or shorthand, he may omit either Secretarial Science 1210 or 2120, thus reducing the hours required for the minor from 21 to 18; a minimum of 18 semester hours is required.)

The Minor in Office Management:

- a. For the student whose major is within The School of Business Administration:
3510, Business Report Writing
3520, Business Letter Writing
3310, Secretarial Office Machines
4410, Office Management
- b. For the student whose major is in another school of the University:
Accounting 2010 and 2020, Fundamentals of Accounting
Economics 2110 and 2120, Principles of Economics I and II
4410, Office Management
Two additional upper-division courses in secretarial science approved by the department chairman.

THE SCHOOL OF EDUCATION

SAM HOWARD JOHNSON, B.S., M.Ed., Ed.D., *Dean*
Room 402, Education Building

THE School of Education has as its objectives (1) to be an articulated part of the general and cultural program of the University; (2) to provide a program of teacher education which promotes the growth and development necessary for successful teaching; (3) to recruit desirable candidates for the teaching profession; (4) to assist in placing teachers; (5) to provide professional service to public schools in the service area; and (6) to develop and carry out a continuing program of educational research. Several curricula leading to the degree of Bachelor of Science in Education are available. Candidates for this degree take required and elective courses within The School of Education and, in preparation for teaching in certain areas, take courses in The School of Arts and Sciences and in The School of Business Administration. Students who wish to matriculate in the teacher education program must meet the special criteria of that program in addition to the general University admission requirements. Applications for admission to this program cannot be considered until the student has completed a minimum of one and one-half years of college work to the satisfaction of the faculty of The School of Education. For details see page 134.

ACCREDITATION

The School of Education holds membership in the American Association of Colleges for Teacher Education. Its undergraduate programs for the preparation of elementary and secondary teachers are fully accredited by the National Council for Accreditation of Teacher Education.

ORGANIZATION OF THE SCHOOL

The School of Education comprises five departments: Curriculum and Instruction, Educational Administration and Supervision, Health and Physical Education, Home Economics, and Music Education. These departments offer a variety of majors and minors, the detailed requirements for which are listed in the section beginning on page 138. The University Campus School, a public school comprising grades 1 through 6, is operated under the supervision of The School of Education.

The School of Education is organized into a lower division and an upper division:

THE LOWER DIVISION comprises the freshman and sophomore years, the first four semesters of university work; courses offered in the lower division are numbered from 1000 through 2999. In order to be admitted to the upper division, the student must have completed the work of the lower division with an average grade of C (2.0). In addition, he must have submitted to his adviser for approval a complete program of study for work in the upper division. Students who complete the work of the lower division with less than a C average will be given one additional semester in which to reach this standard. If, at the end of this additional semester, the student's average is below C, he will be advised to withdraw from the University.

THE UPPER DIVISION comprises the junior and senior years, the last four semesters of undergraduate work; courses offered in the upper division are numbered from 3000 through 4999. Students who have completed the required number of hours and the required residence to be classified as juniors, but who have not completed their basic requirements in the lower division, must schedule these uncompleted requirements during the first semester in which such courses are available. Forty-five semester hours are required in the upper division. In the upper and lower-division requirements no grade of less than C will be accepted in areas of endorsement and in professional courses.

THE UNIVERSITY CAMPUS SCHOOL

The University Campus School, located east of The School of Education Building, is a public school comprising grades 1 through 6, operated by the University as a part of the public school system of the City of Memphis; it offers a broad program of training for approximately 700 students. This school serves the teacher education program as a laboratory in which prospective teachers observe and study, and where a limited number practice the art of teaching. Varied opportunities are offered University students to study children, to study a school program, and to participate in teaching activities. Through The Campus School arrangements have been made for the use of other city schools for purposes of teacher education. Student experiences with the teachers of The Campus School, and with the many other fine teachers in the area, are considered an integral part of preparation for a teaching career.

The University also conducts a Nursery and Kindergarten School, administered by the principal of The Campus School in cooperation with the Department of Curriculum and Instruction and the Department of Home Economics. The school is a non-profit institution and tuition charges are determined by the cost of operation.

ADMISSION

The requirements for admission to The School of Education are those set up for the University as a whole; see page 56.

ADMISSION TO TEACHER EDUCATION PROGRAM

Students who enter Memphis State University for the first time after September 1, 1962 and who wish to prepare themselves for careers as teachers must make formal application for admission to the teacher education program during the second semester of the sophomore year. Students who transfer to Memphis State University after the completion of their sophomore year, or with more than 45 semester hours of credit, must make application during their first semester of residence at Memphis State.

The following factors will be considered by the screening committee in determining a student's eligibility for admission to the teacher education program: (1) academic aptitude, (2) academic achievement, (3) proficiency in English and mathematics, (4) health, (5) social adjustment, (6) communication skills, (7) interest in teaching, and (8) the desire to work effectively with students.

Once admitted to the teacher education program the student must maintain the standards required for admission. If the student falls below any of these standards, his name will be removed from the file of students matriculated in teacher education and he will be advised of this action. He may then either try to bring his record up to a level suitable for re-admission, or drop out of the teacher education program.

In order to be graduated and certified to teach, a student must (1) meet all standards established for admission to the teacher education program, (2) make formal application for and be admitted to that program, (3) complete all requirements for certification (outlined on page 89); and (4) complete all degree requirements in the school of the University in which he is enrolled.

All graduates of The School of Education must be qualified for a teaching certificate.

No student will be enrolled for a course in student teaching until he has been admitted to the teacher education program and has met all the prerequisites for student teaching.

Application forms for admission to the teacher education program may be secured from the office of the dean of The School of Education, Room 402, Education Building. For a detailed explanation of all requirements, the student should consult with his adviser.

DEGREE REQUIREMENTS

To qualify for the Bachelor of Science in Education degree the student must complete 132 semester hours with a grade point average of 2.0 (on a scale in which A has the quality point value of 4; B, 3; C, 2; and D, 1). Of the 132 semester hours required for graduation, at least 45 must be in courses from the upper division (those numbered above 2999).

At least 60 semester hours of the credit applied on the degree must be of liberal content. Courses in the following fields offered in The School of Arts and Sciences will meet this requirement: anthropology, art (non-applied), biology, chemistry, English, geography, geology, history, journalism (non-applied), languages, mathematics, music (non-applied), philosophy, physics, political science, psychology, sociology, and speech. The following courses offered in The School of Education will meet this requirement: Education 2111, 4011, 4012, and 4021; Health 1102; Home Economics 1101, 1104, 2202, and 4101.

General requirements for the degree include the successful completion of (I) the general education program, (II) the professional education program, (III) physical education activity courses, (IV) a major in The School of Education, and (V) certification in two or more teaching areas. Elementary teachers meet only the endorsement required for elementary grades. These requirements are outlined in detail in the sections which follow.

I. THE GENERAL EDUCATION PROGRAM (45 semester hours)

(Courses taken to meet the requirements of this section may, if applicable, be used to meet the requirements of Section V, below.)

English 1101, 1102, 2101, and 2102

Health 1102

History 2601, 2602

Mathematics 1181 for elementary certification; for secondary certification Mathematics 1111 or any higher-numbered mathematics course excluding 1291 (Mathematics for Business).

Speech 2911 for elementary certificate; 1211 or 1311 or 1411 for secondary certificate.

Science: 9 semester hours (including one two-semester laboratory sequence course) in two of the following sciences: biology, chemistry, physics, earth science (Geography 1101, 4111, 4121), Geology 1101 (P. E. majors may take Biology 3630 for second area)

One course (3 semester hours) in one of the following social sciences: anthropology, economics, geography (other than physical geography), political science, sociology.*

One course (3 semester hours each) in the humanities to be chosen from one of the following departments: Art, Classical Languages, Modern Languages, and Philosophy.

One of the following courses: Home Economics 1101, Psychology 1101, Sociology 1111.

II. THE PROFESSIONAL EDUCATION PROGRAM (27 semester hours)

Education 2011, 2111, 3121, and the courses in one of the following groups:

For the elementary certificate: Education 3241, 3251, 3261, 3271, and 4821.

For the secondary certificate: Education 4441, 4841, an appropriate secondary schools methods course, and 3 semester hours of elective applicable for secondary school teachers.

III. PHYSICAL EDUCATION ACTIVITY COURSES

Four semesters of physical education activity courses; students completing two years of Air Force ROTC courses are required to take only two semesters of physical education. No student other than a physical education major may apply more than four semester hours of basic physical education to the minimum degree requirements of 132 semester hours.

IV. A MAJOR IN THE SCHOOL OF EDUCATION

The student will choose one of the following majors offered in The School of Education. The specific courses required for the satisfaction of these majors are listed in the following pages.

Elementary education (offered in the Department of Curriculum and Instruction)

Health

Health and Physical Education

Home economics

Music education

Secondary education (offered in the Department of Curriculum and Instruction)

V. CERTIFICATION IN TWO OR MORE TEACHING AREAS

The student must complete the requirements of individual departments for certification in the State of Tennessee in *two* or more teaching areas (combined minimum of 36 semester hours) with a 2.250 average in each, unless special exception is made by the dean of The School of Education. Elementary school teachers are required to meet only the endorsement for elementary grades. Specific course requirements for all of the endorsements offered in the University are listed in the section beginning on page 89.

*May be used to satisfy only one area.

DIRECTED STUDENT TEACHING

Directed student teaching, offered in the University Campus School and in cooperating schools in the Memphis and Shelby County school systems, provides opportunities for observation of good teaching practices and for practical teaching experience under the direction of supervising teachers.

Students preparing to teach in the elementary schools are required to enroll for nine semester hours of student teaching to be done on an all-day basis for one half a semester. Students preparing to teach in the secondary schools are required to enroll for nine semester hours of student teaching to be done three hours daily for an entire semester, or all day for one half a semester. NOTE: *Students who enroll for student teaching on an all-day basis may not register for any other course which is scheduled to meet during the half-semester in which the student teaching is done.*

All teacher-education students will observe a professional semester when they are enrolled in student-teaching. During this semester, only professional courses will be taken. Elementary teachers will complete Education 3241 prior to the professional semester, and enroll in Education 3251, 3261, 3271, and 4821 within the professional semester. Directed student teaching will be an all day experience. Secondary teachers will enroll in Education 4441 and 4841 during the professional semester. Education 3301 may be taken prior to the professional semester or during the semester. Advisers may assign appropriate courses where indicated to complete the professional semester. Directed student teaching for secondary teachers will be an all-semester assignment.

Exceptions to the requirements for the professional semester may be made when approved by the dean of The School of Education.

Requirements for enrolling in the student teaching program are as follows:

1. The filing of an application with the coordinator of student teaching during the semester prior to the one in which the student teaching is to be done. Applications for student teaching to be done in the fall semester must be filed by April 1, for the spring semester by November 1.
2. Classification as a senior or graduate student.
3. Completion of at least one semester of residence at Memphis State University.
4. An over-all average of at least 2.000; an average in education courses of at least 2.000; an average in the endorsement area of at least 2.250.

5. Completion of Education 2111, 3121, and 2011.
6. Completion of Education 3241, 3251, 3261, and 3271 (for those preparing to teach elementary schools); or Education 3301 (for those preparing to teach in secondary schools).
7. Completion of either the elementary or secondary endorsement.
8. Approval by the applicant's adviser and by the coordinator of student teaching.

DEPARTMENTAL REQUIREMENTS FOR MAJORS AND MINORS

DEPARTMENT OF CURRICULUM AND INSTRUCTION. The Department of Curriculum and Instruction offers majors in two areas (elementary education and secondary education) and minors in four areas (elementary education, secondary education, library service, and special education).

The Majors:

ELEMENTARY EDUCATION: 27 semester hours, as follows:

Education 2011, 2111, 3121, 3241, 3251, 3261, 3271, 4821; and completion of the requirements of general education and elementary grades endorsement area.

SECONDARY EDUCATION: 27 semester hours, as follows:

Education 2011, 2111, 3121, 3301, 4441, 4841, one elective appropriate for secondary school teachers, and completion of the requirements of general education and two endorsement areas.

The Minors: A co-requisite for the minors listed below is the completion of the requirements for certification to teach in the State of Tennessee; these requirements are outlined in the section beginning on page 89.

ELEMENTARY EDUCATION: Same as elementary education major.

SECONDARY EDUCATION: Same as secondary education major except only one endorsement required.

LIBRARY SERVICE: 18 semester hours in library service courses in conference with the adviser, plus certification in any area of either elementary or secondary education.

SPECIAL EDUCATION: 21 semester hours in Special Education courses chosen in conference with the adviser, plus certification in elementary education.

DEPARTMENT OF EDUCATIONAL ADMINISTRATION AND SUPERVISION. The Department of Educational Administration and Supervision does not offer courses at the undergraduate level leading to a degree program. Students who plan graduate study in this area should consult the Bulletin of The Graduate School.

DEPARTMENT OF HEALTH AND PHYSICAL EDUCATION. Majors and minors are offered in (1) health and (2) health and physical education.

The Major in Health: 36 semester hours, as follows:

Health 1102, 1202, 2102, 2202, 3102, 3202, 4302 (4402), 4602, 4702, 4902

Six semester hours chosen from the following courses:

Health 1302 (or Biology 3400), 2302, 4102 (or 4202), (with permission of the instructor and provided that student has had or is enrolled in Health 4302).

The Major in Health and Physical Education

FOR MEN: 42 semester hours, as follows:

Health 1102, 2102 or 3502, 3102, 3202 (12 sem. hrs.)
 Physical Education 1101, 1111, 1131 or 1141, 1171, 1251,
 1311, 1321, 2503, 3203, 3303, 3403, 3503, 3603, 4204,
 4503 (26 sem. hrs.)

Two of the following courses: Physical Education 2103, 2203,
 2303, 2403 (4 sem. hrs.)

Biology 1631, 1632, 3630

FOR WOMEN: 42 semester hours, as follows:

Health 1102, 2102, 3102, 3202 (12 sem. hrs.)
 Physical Education 1101, 1111, 1131 or 1141, 1221, 1251,
 1271, 1311, 1321, 2503, 3103, 3203, 3303, 3403, 3503,
 3603, 4204, 4503 (30 sem. hrs.)
 Biology 1631, 1632, 3630

The Minor in Health: 18 semester hours, as follows:

Health 1102, 2102, 2202, 3102, 3202

One of the following courses: Health 4802, Sociology 2420, Home Economics 4101, Special Education 4173 (Health 4302 on recommendation of department chairman).

The Minor in Health and Physical Education

FOR MEN: 30 semester hours, as follows:

Health 1102, 2102 or 3502, 3102, 3202 (12 sem. hrs.)
 Physical Education 1101, 1251, 1311, 1321 (4 sem. hrs.)
 Physical Education 2103 or 2203 or 2303 or 2403, 3203, 3303,
 3503, 3603, 4503 (14 sem. hrs.)

FOR WOMEN: 32 semester hours, as follows:

Health 1102, 2102, 3102, 3202 (12 sem. hrs.)
 Physical Education 1101, 1221, 1251, 1311, 1321 (5 sem. hrs.)
 Physical Education 3103, 3203, 3303, 3503, 3603, 4503, (15
 sem. hrs.)
 Biology 1631, 1632

DEPARTMENT OF HOME ECONOMICS

The Major: 36 semester hours in home economics courses and 13 to 16 semester hours in related courses, as follows:

Home Economics 1101, 1105, 2102, 2202, 2103, 2205, 3302, 3305,
 3402, 4101, 4103, 4104.

Biology 3730

Sociology 1111

General Education

The Minor: 18 semester hours in home economics courses, including Home Economics 1105, 1104, (or 2205), 2102, 2202, 4101, and one additional course from the upper division.

DEPARTMENT OF MUSIC EDUCATION

The Major: The major requires the completion of (1) a group of basic music courses and (2) a group of courses in one of two concentration areas:

1. Basic music courses (58 semester hours):

Music 1012, 1013, 1032, 1033, 1041, 2014, 2015, 2034, 2035, 3031, 3033, 3035, 3131, 3132, 3235.

Music ensembles: 8 semester hours

Applied music (either class or individual instruction, or both, in piano, voice, winds, strings, as determined by the student's adviser.) For details of piano requirements see page 245.

1. Concentration areas (Choose one.) See page 94 for further information on endorsements.

- a. School music (9 semester hours)

Music 3236

Music Education 1311, 1711, 1911, 4231

- b. Instrumental music (12 semester hours)

Music 3236

Music Education 4232

Individual instruction in one instrument: 6 semester hours

The Minor: The minor requires the completion of (1) a group of basic music courses and (2) a group of courses in one of two concentration areas:

1. Basic music courses (33 semester hours)

Music 1012, 1013, 1032, 1033, 2014, 2034 (or any combination of basic theory courses totaling 12 semester hours.)

Music 3035, 3131 (or 1041 or 3132) and 3235

Applied music (either class or individual instruction, or both, in piano, voice, winds, strings, as determined by the student's adviser.) For details of the piano requirements see page 245.

2. Concentration areas. (Choose one.)

(The requirements in each of the concentration areas for the minor are the same as for the major, outlined above.)

THE SCHOOL OF LAW

ROBERT DOYLE COX, LL.B., LL.M., *Dean*
Room 5, Law School Annex

THE School of Law offers a program of instruction leading to the degree of Bachelor of Laws. A student may enroll in a regular program, attending classes during the day, or in an extended program, attending classes in the evening. A student in the regular program may graduate in three academic years. A student in the extended program may graduate in four academic years plus some work in intervening summer sessions. A student regularly employed more than 20 hours per week may not pursue the regular program.

To be eligible for admission a student must have received a bachelor's degree from an accredited college or university and must have taken the Law School Admission Test administered by the Educational Testing Service, Princeton, New Jersey. Admission to The School of Law is on a selective basis.

Admission to advanced standing may be given to a student who qualifies for admission, and who is eligible for re-enrollment in the law school in which his previous work has been taken, provided that such school is on the approved list of the American Bar Association.

The successful completion of 84 semester hours work, including all required courses, with the prescribed grade average is necessary for graduation. The last 28 semester hours must be taken in this school.

The regulations and policies of the School of Law are set out in greater detail in a separate bulletin. Applications for admission must be made on forms supplied by the School of Law. Inquiries should be addressed to the Dean of the School of Law.

THE DIVISION OF ENGINEERING AND APPLIED SCIENCE

FREDERIC HARTWELL KELLOGG, G.E., M.A., Ph.D., *Director*
Room 209, School of Education Building

The Division of Engineering and Applied Science offers a program of courses for graduate engineers leading to the Master of Science degree. The fields of civil, mechanical, and electrical engineering are emphasized. Most courses are presently offered in the evening hours to serve the needs of practicing engineers in the Memphis area. Graduate research is being initiated in several areas.

Applicants for admission to the graduate program must meet all admission requirements of The Graduate School of the University and must possess a valid undergraduate degree in engineering or a physical science. Non-engineering graduates, however, must complete certain required undergraduate engineering courses before embarking on their graduate programs.

Undergraduates planning to enter the graduate engineering program should schedule a balanced series of courses in the humanities, social sciences, physical sciences, and the applied (or engineering) sciences. Plans are now being made for an undergraduate program at Memphis State University leading to a degree in applied science which will qualify the student for admission to a program of study leading to a professional engineering degree.

Further information concerning admission, fees, course programs, and the like, for both the graduate and the undergraduate programs, may be obtained from the office of the director of the Division.

THE DEPARTMENT OF INDUSTRIAL TECHNOLOGY

R. J. COLTHARP, B.A., M.S., *Chairman*
Room 100, Industrial Technology Building

THE objectives and services of the department are as follows:

(1) To provide professional preparation for teachers of industrial arts in public and private schools; especial emphasis is placed on preparation of teachers for the elementary, secondary, and area schools, with therapeutical preparation being made available through a cooperative program with Kennedy Veterans Hospital. (2) To provide opportunities for pre-engineering students to participate in technological laboratory activities. (3) To contribute to the general educational aims of the University through studies of current industrial materials and practices. (4) To provide definite curricula in specified areas of technology.

ADMISSION

Requirements for admission to the Department of Industrial Technology are the same as those for admission to the University, outlined in the section beginning on page 56.

RESIDENCE REQUIREMENTS

A transfer student must be in residence at Memphis State University during his final semester before graduation and for at least one additional semester during his junior and senior years. University residence requirements are explained in detail on page 88.

DEGREE REQUIREMENTS

To qualify for the degree with a major in industrial technology the student must complete a minimum of 132 semester hours with a quality point average of 2.0 (on a scale in which an A has the quality point value of 4; B, 3; C, 2; D, 1). Of the 132 semester hours required for graduation, at least 45 semester hours must be in courses from the upper division (those numbered above 2999). To be applicable toward a major or a minor all courses taken in the Department of Industrial Technology must be completed with a grade of C or better.

General requirements for the degree include the successful completion of (I) basic University requirements, (II) basic courses in industrial technology, (III) a major in industrial technology, (IV) a minor in another department of the University, and (V) approved elective courses. These requirements are outlined in detail in the sections which follow:

I. BASIC UNIVERSITY REQUIREMENTS

All of these requirements must be completed before the student will be permitted to enroll in any senior courses (those numbered above 3999).

English 1101, 1102, 2101, 2102

History 2601, 2602

Physical Education

Air Force ROTC (for men only)

II. BASIC DEPARTMENTAL COURSES

Industrial Technology 1411, 1511, 1611, 1711, 2811, and 3411

III. THE MAJOR

Each candidate must complete a major in one of the following areas, detailed requirements for which will be found below.

Architectural technology

Construction technology

Drafting and design

Industrial arts education

Manufacturing technology

Wood technology

IV. THE MINOR IN ANOTHER DEPARTMENT OF THE UNIVERSITY

Each candidate must complete a minor in another department of the University; specified minors are listed for all major areas except industrial arts education.

V. ELECTIVES

The candidate will elect courses from any department in any school in the University to bring the total to 132 semester hours. The outlines of the detailed requirements for the six majors contain recommendations as to the specific areas in which these electives should be concentrated; in every case they are subject to the approval of the student's adviser.

REQUIREMENTS FOR MAJORS AND MINORS IN INDUSTRIAL TECHNOLOGY

THE MAJORS

ARCHITECTURAL TECHNOLOGY: This major is designed for students wishing to specialize in technology as it relates to architecture. Emphasis is placed on the technological and applied approach, with lesser emphasis on design and theory. Students electing this major are usually those who have, or expect to secure, employment as architectural draftsmen. Specific requirements for this major are:

Industrial Technology: 36 semester hours as follows: 1451, 1551, 2451, 2551, 2561, 3401, 3471, 3491, 3511, 3521, 3531, and 4944.

Art or Mathematics: Completion of a minor in one of these departments.

Mathematics (if not selected as a minor): 1212, 1321, 8 semester hours.

Art (if not selected as a minor): 9 semester hours as prescribed by adviser.

Business Speech: 3 semester hours.

Secretarial Science: typewriting and business report writing, 6 semester hours.

Economics: 6 semester hours.

Chemistry or physics: 8 semester hours.

Marketing: 3 semester hours.

Electives as needed to meet minimum requirements.

CONSTRUCTION TECHNOLOGY: This major is designed for students wishing to specialize in construction, with emphasis on surveying and related fields. Specific requirements for this major are:

Industrial Technology, 39 semester hours as follows: 1451, 1551, 2451, 3401, 3431, 3451, 3471, 3491, 3511, 3531, 3631, 3731, 4944.

Surveying minor

Mathematics: 1212, 1321, 8 semester hours.

Business speech: 3 semester hours.

Secretarial Science: typewriting and business report writing, 6 semester hours.

Economics: 6 semester hours.

Chemistry or physics: 8 semester hours.

Management: business law, 6 semester hours, real estate and real estate law, 6 semester hours.

DRAFTING AND DESIGN: This major is designed for students interested in professional training in drafting and industrial design; a close correlation is maintained with programs in local industry through field study and guest lecturers in order that emphasis may be placed on current design problems, methods, and practices in industry.

Specific requirements for the majors are as follows:

Industrial Technology: 24 semester hours as follows: 1521 or 1551, 2511, 2531, 2551, 3511, 3521, 4471, 4491.

Art: completion of the requirements for a minor in the Department of Art, including Art 1201, 1204, 1211, 3223 and 12 additional semester hours in art courses from the upper division.

Chemistry or physics: 6-10 semester hours.

Economics or Sociology: 6 semester hours.

Marketing: 6 semester hours.

Mathematics: 6-10 semester hours.

Psychology: 9 semester hours.

Speech: 3 semester hours.

(The student working toward a major in drafting and design should concentrate as many of his elective hours as possible in courses in marketing.)

INDUSTRIAL ARTS EDUCATION: This major is designed for students interested in meeting Tennessee state certificate requirements for teaching industrial arts or participating in therapeutical work; special attention is given to local instructional methods and problems through visits to

local schools and through interviews with local, area, and state supervisors. Specific requirements for this major are as follows:

Industrial Technology:

- (a) 18 semester hours as follows: 2551, 2911, 3385, 3621, 4361, 4371.
- (b) Additional industrial technology courses to complete a minimum of 9 semester hours in each of two of the following areas: drafting, woodwork, metalwork, electricity.*

Completion of the general and professional education requirements for a secondary school certificate with endorsement in industrial arts. (Certification requirements are outlined in detail on page 89.)

In addition, courses 2611, 2721, 3385, 3611, 3621, and 3831 are oriented toward the preparation of teachers, and are required in the respective areas for endorsement.

MANUFACTURING TECHNOLOGY: This major is designed for students wishing to participate in industry as technologists; emphasis is placed on training for manufacturing and production, with additional emphasis on the techniques and procedures of industrial engineering. Specific requirements for this major are:

Industrial Technology: 30 semester hours, as follows: 3386, 3421, 3431, 3631, 3731, 4381, 4471, 4472, 4481, 4491.

Management or marketing: completion of the requirements for a minor in one of these departments.

Management or marketing: 6 semester hours in the department not selected as the minor.

Chemistry or physics: 8-10 semester hours

Economics or sociology: 6 semester hours

Mathematics: 6-10 semester hours

Psychology: 9 semester hours

Speech: 3 semester hours

WOOD TECHNOLOGY: This major is designed for students interested in the lumber industry, especially the processing and use of lumber and wood products; close contact is maintained with local industry through visits, films, and guest lectures. Specific requirements for this major are:

Industrial Technology: 30 semester hours as follows: 2551, 2611, 2721, 3421, 3611, 3621, 3631, 4471, 4472, 4491.

Biology or chemistry: completion of the requirements for a minor in either biology or chemistry.

Economics or sociology: 6 semester hours

Mathematics: 6-10 semester hours

Psychology: 9 semester hours

(The student working toward a major in wood technology should concentrate as many of his elective hours as possible in management or marketing courses.)

THE MINORS:

Industrial Technology: Industrial Technology 1411, 1511, and 15 additional semester hours in industrial technology courses, 9 semester hours of which must be from the upper division. To be counted toward a minor, all industrial technology courses must be completed with a grade of C or better.

*The areas of specialization in industrial technology courses are identified by the second digit in the course numbers: the identifying number for courses in education is 3, in technology is 4, in drafting is 5 (e.g., Industrial Technology 1511, Engineering Graphics); woodwork is 6; metalwork is 7; and electricity is 8.

Safety:

Industrial Technology 3385, 3386

Health 2102

Psychology 2102

Management 3810

3 semester hours in Industrial Technology selected from the following: 4951, 4952, 4953, 4954 or 2 semester hours in Health 3402 and 1 or more semester hours of Industrial Technology in the series 4951-54

SURVEYING:

Geography 3501, 3511

Industrial Technology 1411, 1451, 1511, 2451, 3451

Mathematics 1212, 1321

THE DEPARTMENT OF AEROSPACE STUDIES

ELLIS M. JONES, JR., B.S., M.A., *Lieutenant Colonel,*
United States Air Force, Professor of Aerospace Studies,
Room 404, Jones Hall

THE United States Air Force provides at Memphis State University a four-year Air Force Officer Education Program (ROTC) designed (1) to provide training which will develop skills and attitudes vital to the professional Air Force Officer and (2) to qualify for commissions those college men who desire to serve in the United States Air Force. The program is divided into two units of two years each: (1) the Basic Course, for which the student enrolls during his freshman and sophomore years; and (2) the Advanced Course, for which the student enrolls during his junior and senior years.

THE BASIC COURSE. This two-year course (6 semester hours) is required of all able-bodied male students at Memphis State University who are between 14 and 26 years of age; any exception to this regulation can be made only by the Professor of Aerospace Studies. Normally all veterans and certain members of the Armed Forces Reserves may be excused; such students should note, however, that excuses are not granted automatically; at the time of registration they must be prepared to present evidence of active duty to the Professor of Aerospace Studies. If they elect to enroll in Air Force OEP courses, they may drop them from their schedules only under the rules governing all other University courses. (A SPECIAL NOTE TO RESERVISTS: members of the Armed Forces Reserves may be excused from the Basic Course only if they have served a period of extended active military duty. Reservists who have served six months active duty under the provisions of the Reserve Forces Act of 1955, although not considered veterans, may be excused from the Basic Course with the approval of the Professor of Aerospace Studies. They are cautioned, however, that they must enroll in the Basic Course if they wish to be eligible for consideration for the Advanced Course. Air Force OEP training is accepted on a year-for-year basis in fulfilling reserve training requirements prescribed in the Act of 1955.)

THE ADVANCED COURSE. Cadets are selected for the Advanced Course only when they complete the Basic Course, nor-

mally at the end of their sophomore year. Because all cadets who desire to enroll in the Advanced Course cannot be accommodated, the enrollment is determined by competition based upon physical qualifications, leadership potential, scholastic standing, and recommendations of instructors and tactical officers. Cadets chosen for the Advanced Course will be required to attend a summer training unit for a period of four weeks between their junior and senior years. Senior cadets enrolled under Category I (Pilot) are required to pursue a flight training program including 36½ hours of instruction in single-engine training type aircraft conducted by a civilian flying school selected by the University.

AIR FORCE COMMISSIONS. To secure an OEP commission in the United States Air Force, the Cadet must (1) complete the four-year course of instruction or have credit in lieu of portions of the training; (2) complete a summer training unit; (3) secure a baccalaureate degree from the University; and (4) be physically qualified.

MILITARY DEFERMENTS. Military deferment for an Air Force OEP cadet is based upon his scholastic standing, his potential for leadership, and his physical examination status. A cadet will not be deferred until he has enrolled in his second semester of Air Force OEP and the Department of Aerospace Studies is able to determine whether or not his scholastic standing is high enough to warrant a deferment. Deferments once granted remain in effect as long as the cadet remains in good standing and until he receives his degree and commission. Some reasons for not recommending or for withdrawing a deferment are (1) poor scholastic record, (2) lack of military aptitude, (3) lack of leadership potential, (4) excessive absences, (5) withdrawal from the University, and (6) physical reasons.

PARADES AND REVIEWS. All cadets are required to participate in the Veterans' Day parade, the homecoming review, and at other times throughout the year as required.

UNIFORM DEPOSIT. A \$15.00 uniform and textbook deposit is required of all cadets. Deposits are made in the Department of Aerospace Studies at the time of registration. All items lost or damaged must be paid for by the student concerned. When all items are turned in, the deposit is returned.

THE EVENING DIVISION

WILLIAM A. BROTHERTON, B.S., M.A., Ed.D., *Acting Director*
Room 221, Administration Building

THE Evening Division offers courses in each of the three undergraduate schools of the University, both on the campus and in the Downtown Division. By providing such college courses in the evening this division aims at fulfilling several educational needs not met by the regular day program. Credit courses offered by television, on WKNO-TV, are under the supervision of The Evening Division.

A major objective is to provide instruction leading to baccalaureate degrees for those who, for a variety of reasons, are not able to attend during the day. In a large measure this is simply an extension of the day program into the evening hours. Regular courses are offered and residence credit is granted.

In addition, The Evening Division provides (a) formal courses for students already holding college degrees but desirous of further training; (b) adult vocational-technical training for those seeking upgrading or change in employment; (c) basic lower-division and pre-professional programs for those preparing to enter professional schools; and (d) an extended general education for those interested in increasing their civic and social competence.

Admission requirements for The Evening Division are the same as those for the regular day program; they are outlined on page 56. For admission of Adult-Special Students, see page 59. Standards of instruction and student performance are maintained at the same level established for the day program.

For students who do not desire to earn credit toward a degree, certain courses are available on a non-credit basis; students enrolled for no credit do the same classwork as the regular students but do not receive a grade or credit at the completion of the course.

Fees in The Evening Division, for both part-time and full-time students, are the same as those in the day program; see page 62 for details. Students may arrange their schedules to take courses in both the day and evening programs without additional cost.

Inquiries should be addressed to the director of The Evening Division.

THE EXTENSION DIVISION

ELLERY EARL CRADER, B.S., M.A., Ph.D., *Director*
Room 400, Educational Building

THE Extension Division of Memphis State University is the official avenue through which services of the University are extended to areas off the campus. Both undergraduate and graduate courses are given at centers within the state where suitable advance arrangements are made. The subject matter of the extension courses is the same as that of courses taught on the campus, and grades received in these courses have the same quality value as do grades received in courses taught at the University. Regularly employed staff members of the University teach extension courses.

Candidates for degrees at Memphis State University may take a limited amount of work through The Extension Division; regulations governing the use of extension credit will be found on page 82.

Where circumstances justify, The Extension Division attempts to provide various types of help to organized groups within the University's service area. This assistance may take the form of such activities as conferences, public addresses, consultative service, and other types of school and community aid. Regularly employed staff members of the University are available for this service.

To the end that The Extension Division may continue to improve and expand its services to the people of the state, correspondence is invited with groups or individuals who are interested in any phase of its activities. Please address all inquiries and suggestions to the director of The Extension Division.

THE SUMMER SESSION

HEBER ELIOT RUMBLE, B.S., M.A., Ph.D., *Director*

3416 Educational Building

THE Summer Session consists of two terms of approximately six weeks each and offers accelerated courses in all schools and departments of the University. Students may earn twelve semester hours of graduate credit or fourteen semester hours of undergraduate credit during the summer, with a maximum of six semester hours per term for graduate students and seven semester hours per term for undergraduate students.

Applicants for admission to The Summer Session must meet all admission requirements of the University except that a transfer student who plans to attend Memphis State University *only* in The Summer Session need not submit complete transcripts from schools previously attended; he should request the registrar of the last college attended to mail a statement of good standing to the Registrar; this statement should include the student's classification.

The schedule of fees for The Summer Session is outlined on page 62.

The *Bulletin* of The Summer Session, containing the schedule of classes and information concerning registration procedures, fees, special events, etc., is issued in April of each year. Copies are available in the offices of the Dean of Admissions and the director of The Summer Session.

Part Eight

DESCRIPTION OF COURSES

DESCRIPTION OF COURSES

THE section which follows contains an alphabetical listing of all of the departments in the University. Each department entry contains a list of the faculty members in that department and a description of all course offerings. The official course title appears in bold-face type following the course number. The figures in parentheses after the description of a course denote the number of semester hours of credit for that course. If the credit is variable, to be fixed in consultation with the instructor, that fact is indicated by the minimum and maximum credit, as Biology 4000 (2 to 4).

Courses are numbered according to the following system:

1000-1999	<i>Courses primarily for freshmen</i>	(formerly 100-199)
2000-2999	<i>Courses primarily for sophomores</i>	(formerly 200-299)
3000-3999	<i>Courses primarily for juniors</i>	(formerly 300-399)
4000-4999	<i>Courses primarily for seniors and for which graduate credit is not offered</i>	(formerly 400-499)
5000-5999	<i>Graduate courses open to seniors within 36 semester hours of graduation</i>	(formerly S500-S599)
6000-6999	<i>Senior courses open to graduate students</i>	(formerly G400-G499)
7000-7999	<i>Courses open only to graduate students</i>	(formerly 500-599)

Course numbers have no reference to the semester in which the courses are taught.

The Schedule of Classes is published a few weeks prior to the opening of each semester and The Summer Session. It contains a listing of the specific courses to be offered, with the time, place, and instructor in charge of each section. It also contains special announcements concerning registration procedures. Copies are available in the office of the Dean of Admissions and Records.

I M P O R T A N T N O T I C E

All courses in the curriculum have been renumbered according to a four-digit system. The three-digit figure in parentheses at the extreme right of the course title indicates the number which that course carried in the 1964-65 catalog; the absence of this three-digit figure means that the course has been added to the curriculum this year.

ACCOUNTANCY

PROFESSOR JAMES THOMAS THOMPSON, *Chairman*
Room 103, The School of Business Administration Building

PROFESSORS CRAWFORD and SPICELAND

ASSOCIATE PROFESSOR L. W. CURBO

ASSISTANT PROFESSORS R. S. CURBO, FITZPATRICK,
 HALL, and WRAY

Requirements for the major and minor in accountancy are listed on page 125.

- 2010. Fundamentals of Accounting I. (3). (201)**
 Basic principles, journalizing and posting, the accounting cycle, accruals and deferrals, valuation accounts, special journals including the voucher register. Both semesters.
- 2020. Fundamentals of Accounting II. (3). (202)**
 Payrolls, taxation, partnership, corporations, further applications of accounting theory. Both semesters. PREREQUISITE: Accounting 2010.
- 3720. Accounting Laboratory. (1). (272)**
 The working of a practice set involving current accounting practice. Both semesters. PREREQUISITE: Accounting 2010.
- 3110. Intermediate Accounting I. (3). (311)**
 Accounting records, end-of-period procedure, corrections of prior periods, accounting statements, comparative statements, working capital, miscellaneous ratios, profit and loss analysis, corporations. Both semesters. PREREQUISITE: Accounting 2020.
- 3120. Intermediate Accounting II. (3). (312)**
 Cash and receivables, inventories, tangible operating assets, intangibles, investments, liabilities, reserves and valuation accounts, net income determination, statement of source and application of funds. Both semesters. PREREQUISITE: Accounting 3110.
- 3210. Financial Statement Analysis. (3). (321)**
 Nature and scope of financial reports, business ratios, effectiveness of analysis techniques, interpretation of financial reports, study of typical statements. Fall semester. PREREQUISITE: Accounting 2020.
- 3240. Internal Auditing. (3). (324)**
 Review and appraisal of internal accounting procedures of businesses, verification and analysis of financial and operating reports, function and organization of the internal auditing department. Spring semester. PREREQUISITE: Accounting 3120.
- 3310. Cost Accounting I. (3). (331)**
 Material inventory records, inventory evaluation, accounting for labor, distribution of manufacturing costs, introduction to process cost. Both semesters. PREREQUISITE: Accounting 2020.
- 3320. Cost Accounting II. (3). (332)**
 Process costs, estimated costs, standard costs, budgets. Both semesters. PREREQUISITE: Accounting 3310.

- 4210. Advanced Accounting I. (3). (421)**
 Partnerships, consignments, installment sales, insurance, statement of affairs, receiver's accounts, statement of realization and liquidation, annuities, estates and trusts. Fall semester. PREREQUISITE: Accounting 3120.
- 4220. Advanced Accounting II. (3). (422)**
 Agencies, home and branch offices, consolidations, mergers, foreign exchange. Spring semester. PREREQUISITE: Accounting 3120.
- 4240. Auditing I. (3). (424)**
 Ethics in accounting practices, auditing standards and procedures, programs of audit of various accounts, construction and indexing of various papers, reports to clients. Fall semester. PREREQUISITES: Accounting 3120, 3320.
- 4250. Auditing II. (3). (425)**
 Application of auditing principles to verification of financial statements, preparation of reports, case studies applicable to specific industries, current trends. A practice audit is carried out. Spring semester. PREREQUISITE: Accounting 4240.
- 4450. Accounting Systems. (3). (445)**
 Problems involved in designing accounting installations for various types of business, including the designing of clerical departments and planning of required mechanical devices. Spring semester. PREREQUISITE: Accounting 3120.
- 4460. Controllership. (3). (446)**
 Training in the field of administrative accounting, duties and functions of the controller, organization of the controller's office. Fall semester. PREREQUISITE: Accounting 3320.
- 4510. Federal Income Tax I. (3). (451)**
 Regulations pertaining to individuals and partnerships. Fall semester. PREREQUISITE: Accounting 3120, or permission of the instructor.
- 4520. Federal Income Tax II. (3). (452)**
 Laws and regulations for corporations, estates, and fiduciaries. Spring semester. PREREQUISITE: Accounting 4510.
- 4540. Governmental Accounting. (3). (454)**
 Accounting theory and practice applicable to federal, state, and local government; and to nonprofit institutions; budgetary control; control, classification, and use of funds; financial statements and reports. Fall semester. PREREQUISITE: Accounting 3120.
- (The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)*
- 5110. Accounting Theory I. (3). (S-511)**
 A study of the broad aspects and objectives of accounting with emphasis on generally accepted accounting principles, modern accounting trends, and contemporary controversial topics through a study of current releases of the American Institute of Certified Public Accountants, the American Accounting Association, and other research related to changing accounting concepts. PREREQUISITE: Accounting 4220, or permission of the instructor.

- 5120. Accounting Theory II. (3). (S-512)**
A further study of the development of accounting theory and the influence of professional accounting societies and regulatory agencies upon the accounting profession. PREREQUISITE: Accounting 5110.
- 5240. Advanced Auditing. (3). (S-524)**
Review and refinement of generally accepted auditing standards, procedures and extension of auditing procedures; preparation of audit reports and study of special investigations; study of auditing research bulletins of the American Institute of Certified Public Accountants, and pronouncements of the S. E. C. and other regulatory agencies. PREREQUISITE: Accounting 3240 or 4240 or permission of instructor.
- 5310. Standard Cost. (3). (S-531)**
Budgets, determination of standards, variances and their functions, cost reports, profit projecting. PREREQUISITE: Accounting 3320.
- 5510. Advanced Taxation. (3). (S-551)**
Selected research and study in the taxation of individuals and business organizations by federal and state governments; preparation of selected state and federal tax returns including those associated with income, excise, gift, death, sales, and payroll; tax practice and procedures. PREREQUISITE: Accounting 4520 or permission of instructor.
- 5810. Internship in Accounting. (3). (S-581)**
Seniors majoring in public accounting, after receiving approval of the accounting faculty, are placed in offices of cooperating public accounting firms to receive on-the-job training under the direct supervision of a certified public accountant and the general supervision of the University accounting staff. Credit is allowed upon acceptance of report of work done, verified by supervising accountant, and completion of a qualifying examination. Minimum time: 500 hours. Both semesters.
- 5830. Current Accounting Problems I. (3). (S-583)**
Review of C. P. A. Examination, including theory of accounts, accounting practice, and auditing. Open to persons with substantial accounting backgrounds, and on permission of instructor. Spring semester.
- 5840. Current Accounting Problems II. (3). (S-584)**
Continuation of study of current accounting problems encountered in C.P.A. examinations; review of business law relating to C.P.A. examinations with emphasis on the Uniform Commercial Code; brief review of accounting theory as it pertains to the C.P.A. examination. PREREQUISITE: Permission of instructor.

GRADUATE COURSES IN ACCOUNTANCY

The 4000 and 5000 courses described in the preceding section may be taken for graduate credit. For further details of the graduate program see the Bulletin of The Graduate School.

AEROSPACE STUDIES

LIEUTENANT COLONEL ELLIS M. JONES, JR.,
Professor of Aerospace Studies
Room 404, Jones Hall

**ASSISTANT PROFESSORS: LIEUTENANT COLONEL JOSEPH,
 MAJOR JENKINS, MAJOR RUTHERFORD, MAJOR WERTZ, CAPTAIN DEERE,
 CAPTAIN HUFFMAN, CAPTAIN MOISE, AND CAPTAIN TERRY**

Details of the Air Force Officer Education Program (including commissions, required courses, military deferments, etc.) will be found on page 148.

- 1111. Defense of the United States. (1). (111)**
 Orientation to Air Force OEP, basic military leadership principles and practices, and participation in military drills and ceremonies.

- 1112. Defense of the United States. (2). (112)**
 An introductory course exploring the causes of present conflicts as they affect the security of the United States. This course includes analysis of democracy and communism, the United States power position in world affairs, the armed forces as an instrument of national policy, missions and functions of the Air Force, and the students' relation to United States world commitments. Two class hours per week and one hour of leadership laboratory.

- 2211. World Military Systems. (2). (211)**
 A comparative study of world military forces to include free world land and naval forces, free world air forces, communist military systems, and trends in the development and employment of military power. Two class hours per week and one hour of leadership laboratory.

- 2212. World Military Systems. (1). (212)**
 Practical leadership activities involving small groups; moral foundations of leadership; participation in military drills and ceremonies.

- 3311. Growth and Development of Aerospace Power. (3). (311)**
 A survey course about the nature of war; development of airpower in the United States; mission and organization of the Defense Department; Air Force concepts, doctrine, and employment; aeronautics and space operations; and the future development of aerospace power. Includes the United States space programs, vehicles, systems, and problems in space exploration. Three class hours per week and one hour of leadership laboratory.

- 3312. Growth and Development of Aerospace Power. (3). (312)**
 A continuation of Aerospace Studies 3311.

- 4411. The Professional Officer. (3).**
 A study of professionalism, leadership and management. Includes the meaning of professionalism, professional responsibilities, the Military Justice System; leadership theory, functions and practices; management principles and function; problem solving; and management tools, practices, and controls. Three class hours per week and one hour of leadership laboratory.

- 4412. The Professional Officer. (3).**
 A continuation of Aerospace Studies 4411.

ANTHROPOLOGY

(See SOCIOLOGY AND ANTHROPOLOGY)

ART

PROFESSOR DANA DOANE JOHNSON, Chairman

Room 310, Jones Hall

PROFESSORS ALLGOOD and GOVAN

ASSOCIATE PROFESSOR DAILEY

ASSISTANT PROFESSORS ALEXANDER, NAVÉ, PULLIAM, and SORRELLE

MR. CHRISTENBERRY, MRS. GOVAN, MR. OWENS

MRS. POODRY, and MR. THOMAS

Requirements for the major and minor in art are listed on page 110; the program for the Bachelor of Fine Arts degree is outlined on page 106.

- 1101. Introduction to Art. (3). (111)**
An introduction to the fundamental principles of the fine arts, aimed at providing an understanding of art products and processes as a basis for judgment and enjoyment of all types of art expression.
- 1201. Basic Design. (3). (121)**
An introduction to design as a basic factor in creative expression.
Two lecture, two laboratory hours per week.
- 1204. Color Fundamentals. (3). (122)**
A modern approach to the study of color, its use and enjoyment.
Two lecture, two laboratory hours per week.
- 1211. Basic Lettering. (3). (113)**
Fundamental letter construction, the history of alphabets, and the effects of tools and materials upon individual letter forms, with practical problems in hand lettering in both pen and brush technique.
Two lecture, two laboratory hours per week.
- 1311. Beginning Drawing. (3). (115)**
An introduction to the materials and techniques of basic drawing.
Two lecture, two laboratory hours per week.
- 1314. Figure Structure. (3). (116)**
Analysis of the structure of the human figure with emphasis on contour, gesture, and volume.
Two lecture, two laboratory hours per week.
- 1551. Architectural Design. (3). (Same as Industrial Technology 1551).**
Drawing methods as applied to architectural practice; affords experience in planning and executing drawings necessary for residential design and construction.
Two lecture, two laboratory hours per week.
- 2101. World Art I. (3).**
The development of the visual arts from prehistoric times through the medieval period; their use by man as a social, cultural, and educational force; brief survey of the art of the Far East.

- 2102. World Art II. (3).** Continues (but does not presuppose) World Art I; a survey of the development of the visual arts from the medieval period through the Renaissance to the present.
- 2211. Typography. (3). (Same as Journalism 2211).** A lecture laboratory study of the development of type and the processes of composition, engraving, stereotyping, and printing. Students are provided opportunities to practice the effective use of type and illustration in mass communication.
- 2213. Lettering and Layout. (3). (207)** Practical problems involving lettering and layout.
Two lecture, two laboratory hours per week.
- 2231. Interior Design. (3). (215)** A survey of the field of interior design and some of its underlying principles.
Two lecture, two laboratory hours per week.
- 2241. Textile Design. (3). (216)** An introduction to the field of fabric designing with emphasis on creative problems.
Two lecture, two laboratory hours per week.
- 2311. Perspective. (3). (214)** Theory and practice of perspective projection and its various applications.
Two lecture, two laboratory hours per week.
- 2321. Drawing and Painting. (3). (213)** Theory and practice in drawing and painting in various media.
Two lecture, two laboratory hours per week.
- 2351. Graphics. (3). (241)** An introduction to the graphic arts, primarily concerned with the planning and execution of woodcuts.
Two lecture, two laboratory hours per week.
- 2511. Sculpture. (3). (231)** An introduction to the basic materials and techniques of sculpture.
Two lecture, two laboratory hours per week.
- 3121. Ancient Art. (3). (337)** A study of architecture, sculpture, painting, and the minor arts from prehistoric times to the fall of the Roman Empire, including Egyptian, Sumerian, Greek, and Roman art.
- 3161. Art in America. (3). (313)** The development of American art including architecture, sculpture, painting, and the minor arts from pre-Columbian times to 1893.
- 3162. Art in America II. (3).** A continuation of Art 3161, dealing with architecture, sculpture, and painting in America from 1893 to the present.
- 3221. Advertising Design. (3). (315)** An introduction to the methods and techniques of advertising layout, with practical problems involving rough, presentation, and finished art work.
Two lecture, two laboratory hours per week.

- 3222. Advertising Design. (3).** (316)
A continuation of Art 3221, offering further study in the technique of newspaper, magazine, and direct-mail layout.
Two lecture, two laboratory hours per week.
- 3223. Packaging and Display. (3).** (323)
A study of package designing and display technique.
Two lecture, two laboratory hours per week.
- 3231. Interior Design. (3).** (317)
Practical problems in interior architecture and design. PREREQUISITE: Art 2231 or permission of instructor.
Two lecture, two laboratory hours per week.
- 3232. Interior Design. (3).** (318)
A combination of Art 3231, offering further study in interior organization and the designing of residential and commercial interiors. PREREQUISITE: Art 2231 and 3231 or permission of instructor.
Two lecture, two laboratory hours per week.
- 3331. Oil. (3).** (333)
A preliminary course in the theory and practice of oil painting.
One lecture, five laboratory hours per week.
- 3332. Oil. (3).** (334)
A continuation of Art 3331 with special attention given to the essentials of still-life, landscape, and portrait painting.
One lecture, five laboratory hours per week.
- 3333. Casein. (3).** (331)
Theory and practice in casein painting.
One lecture, five laboratory hours per week.
- 3334. Casein. (3).** (332)
A continuation of Art 3333 with emphasis on further development of techniques.
One lecture, five laboratory hours per week.
- 3351. Graphics. (3).** (335)
A continued study in the graphic arts with further emphasis on woodcut and etching. PREREQUISITES: Art 2351, or permission of the instructor.
One lecture, five laboratory hours per week.
- 3352. Graphics. (3).** (336)
A continuation of Art 3351 with emphasis turning to personal expression. PREREQUISITES: Art 2351 and 3351, or permission of the instructor.
One lecture, five laboratory hours per week.
- 3411. Art Education. (3).** (301)
An introductory course in the development of skills and methods in the school art program, with emphasis on materials and ideas important to children's art expression and growth.
- 3511. Sculpture. (3).**
The problems of sculptural form as expressed in metal, wood, and related materials.
One lecture, five laboratory hours per week.

3512. Sculpture. (3).

A continuation of Art 3511 with further emphasis on techniques.
One lecture, five laboratory hours per week.

3513. Ceramic Sculpture. (3).

The problems of sculptural form as they relate to ceramic media.
Two lecture, two laboratory hours per week.

3514. Ceramic Sculpture. (3).

A continuation of Art 3513 with further emphasis on techniques.
One lecture, five laboratory hours per week.

3521. Ceramics. (3).

(339)

An introductory course in pottery-making, including hand forming and production processes using clays, plaster, and cements.
One lecture, five laboratory hours per week.

3522. Ceramics. (3).

(340)

A continuation of Art 3521, offering further study in pottery-making and glazing with emphasis on design.
Two lecture, two laboratory hours per week.

3531. Arts and Crafts. (3).

(361)

Introductory arts and crafts, including leather and metal craft, weaving, and ceramics, as they relate to educational and recreational areas.

3541. Packaging and Display. (3).

(324)

A continuation of Art 3223 with attention given to trademark designs, package renderings and practical displays.
Two lecture, two laboratory hours per week.

4111. Prehistoric Art. (3).

An examination of the art products of the various Paleolithic, Mesolithic, Neolithic, Bronze, and Iron Age cultures, with emphasis given to Franco-Cantabrian Cave Paintings and Megalithic Architecture.

4131. Early Christian and Byzantine Art. (3).

The development of architecture, sculpture, and painting through the early medieval period, with emphasis on early Christian and Byzantine art.

4134. Romanesque and Gothic Art. (3).

The development of architecture, sculpture, and painting during the Romanesque and Gothic periods.

4141. Renaissance Art. (3).

(411)

Western art and architecture from the medieval period through the Renaissance and post-Renaissance periods.

4146. Baroque Art. (3).

An historical study of the architecture, sculpture, and painting from the end of the Renaissance to the Industrial Revolution.

4151. Nineteenth-Century Art. (3).

A study of the art movements of the nineteenth century from Neo-Classicism to Impressionism.

4154. Twentieth-Century Art. (3).

A study of the major art developments in Europe and the United States from Post-Impressionism to the present.

4163. Pre-Columbian Art. (3).

A specialized study of the art and architecture of the Pre-Inca and Inca peoples of South America and the Maya, Zapotec, Toltec, Aztec, and related peoples of Mexico.

4171. Oriental Art. (3).

(409)

A general survey of Oriental art from the earliest times to the present, dealing specifically with Persian, Indian, Chinese, and Japanese art.

4181. Primitive Art. (3).

(451)

A survey of the art of the primitive Negro of Africa, the aboriginal peoples of Oceania, and the American Indian.

4221. Advertising Design. (3).

(423)

Advanced problems in the fields of advertising and merchandising design. PREREQUISITES: Art 3221 and 3222 or permission of the instructor.

One lecture, five laboratory hours per week.

4222. Advertising Design. (3).

(424)

A continuation of Art 4221 with special attention given to individual problems and personal approach. PREREQUISITES: Art 3221, 3222, and 4221, or permission of the instructor.

One lecture, five laboratory hours per week.

4231. Interior Design. (3).

(429)

Advanced study in interior design. Problems in designing complete interiors for homes and commercial structures. PREREQUISITES: Art 2231, 3231, and 3232, or permission of instructor.

One lecture, two laboratory hours per week.

4232. Interior Design. (3).

(430)

A continuation of Art 4231 with further problems in home and commercial interiors. PREREQUISITES: Art 2231, 3231, 3232, and 4231, or permission of instructor.

One lecture, five laboratory hours per week.

4233. Interior Rendering. (3).

(425)

Professional techniques in the rendering of interiors and the construction of models.

Two lecture, two laboratory hours per week.

4234. Interior Rendering. (3).

(426)

A continuation of Art 4233 with further emphasis on rendering techniques.

Two lecture, two laboratory hours per week.

4321. Drawing and Painting. (3).

(431)

An advanced course in drawing and painting methods with emphasis on transparent watercolor. PREREQUISITES: Art 2321 or permission of instructor.

Two lecture, two laboratory hours per week.

4322. Drawing and Painting. (3).

(432)

A continuation of Art 4321 with attention given to various mixed media. PREREQUISITES: Art 2321 and 4321 or permission of instructor.

Two lecture, two laboratory hours per week.

- 4331. Oil. (3).** (433)
A consideration of advanced problems in oil painting, presupposing that the student has mastered basic techniques and is ready for a more experimental approach to the subject. PREREQUISITES: Art 3331 and 3332, or the permission of the instructor.
One lecture, five laboratory hours per week.
- 4332. Oil. (3).** (434)
A continuation of Art 4331 with emphasis on the development of a personal style. PREREQUISITES: Art 3331, 3332, and 4331, or permission of the instructor.
One lecture, five laboratory hours per week.
- 4341. Illustration. (3).** (421)
A survey of the many areas requiring the services of an illustrator and including the preparation of book, magazine, advertising, and television illustrations.
Two lecture, two laboratory hours per week.
- 4342. Illustration. (3).** (422)
A continuation of Art 4341, dealing with analysis of fine art techniques of drawing and painting as they apply to commercial illustration.
Two lecture, two laboratory hours per week.
- 4351. Graphics. (3).** (441)
Specialization in one or two graphic media. Students are encouraged to develop a personal imagery and the necessary technical abilities. PREREQUISITES: Art 2351, 3351, and 3352, or permission of the instructor.
One lecture, five laboratory hours per week.
- 4352. Graphics. (3).** (442)
The culminating course in the graphic arts in which work may be done in woodcut, etching, or lithography. PREREQUISITES: Art 2351, 3351, 3352, and 4351, or permission of the instructor.
One lecture, five laboratory hours per week.
- 4611. Art Seminar. (3).** (461)
Original research in the student's area of concentration, the extent of the project to be approved by the art faculty.
- 4621. Workshop in Art. (3).** (415)
The study of specific art problems as they apply to the individual student with emphasis on basic art concepts and creative experience. PREREQUISITE: permission of the instructor.
- 4622. Workshop in Art. (3).** (416)
A continuation of Art 4621, providing study of problems appropriate to the need of the individual student. PREREQUISITE: permission of the instructor.
- 4641. Study and Travel in Art. (3 or 6).** (407)
Travel to important art centers of Europe and the Orient and specialized study under the direction of a faculty member of the Department of Art.

BIOLOGY

PROFESSOR CARL DEE BROWN, Chairman
Room 103, Biology Building

PROFESSOR RUDOLPH

**ASSOCIATE PROFESSORS FOLDEN, HOWELL, MCGOWAN,
 PARCHMAN, and SMITH**

**ASSISTANT PROFESSORS BANCROFT, FEISAL, SIMONTON, WELBOURNE,
 WILHELM, and WISE**

**MR. BLACK, MR. CUNNINGHAM, MRS. ELEAZER, MR. HOUSTON,
 MR. MONTGOMERY, and MR. WARBROD**

Requirements for the major and minor in biology are listed on page 111. Information concerning pre-professional curricula will be found on page 89 and 102. The program for the degree of Bachelor of Science in Medical Technology is outlined on page 109.

- 1001. Introduction to Biology. (3). (111)**
 An introductory survey of biology, with emphasis on the animal kingdom, designed for non-science majors. Credit in this course is not acceptable for the biology major or in related pre-professional curricula. Credit not allowed for both Biology 1001 and 1600.
Two lecture, two laboratory hours per week.
- 1002. Introduction to Biology. (3). (112)**
 A continuation of Biology 1001, with emphasis on the plant kingdom. Credit in this course is not acceptable for the biology major or in the pre-professional curricula. Credit not allowed for both Biology 1002 and 1200.
Two lecture, two laboratory hours per week.
- 1200. General Plant Biology.(4). (141)**
 A survey of the plant kingdom considering distribution, taxonomic relationships, morphology, physiology, and economic importance of selected forms.
Three lecture, two laboratory hours per week.
- 1400. Microbiology. (4). (130)**
 A course designed to meet the requirements of student nurses and majors in the Department of Health and Physical Education.
Three lecture, two laboratory hours per week.
- 1600. General Animal Biology. (5). (142)**
 A survey of the animal kingdom considering distribution, taxonomic relationships, morphology, physiology, and economic importance of selected forms.
Three lecture, four laboratory hours per week.
- 1631. Human Anatomy and Physiology. (3). (131)**
 A study of the structure and function of the human organism, designed primarily for majors in the Department of Health and Physical Education.
Two lecture, two laboratory hours per week.
- 1632. Human Anatomy and Physiology. (3). (132)**
 A continuation of Biology 1631, designed primarily for majors in the Department of Health and Physical Education. PREREQUISITE: Biology 1631 or the equivalent.
Two lecture, two laboratory hours per week.

- 1660. Anatomy and Physiology of the Eye.** (3). (133)
A detailed study of the structure and function of the human eye and related areas of the nervous system. Open only to students preparing to instruct the visually handicapped. This course will not satisfy any part of the science requirement for the baccalaureate degree.
Two lecture, two laboratory hours per week.
- 1731. Anatomy and Physiology.** (4). (121)
A detailed study of the structure and functions of the human organism. This course is open only to student nurses.
Three lecture, two laboratory hours per week.
- 1732. Anatomy and Physiology.** (4). (122)
A continuation of Biology 1731. This course is open only to student nurses. PREREQUISITE: Biology 1731 or the equivalent.
Three lecture, two laboratory hours per week.
- 2001. Elements of Biology.** (3).
A study of the basic concepts of animal and plant life. (This course, designed for students in The School of Education seeking certification in elementary education, will not satisfy science requirements for degrees in other schools of the University.)
Two lecture, two laboratory hours per week.
- 2002. Natural History and Bio-Conservation.** (3).
Emphasis is placed on plants and animals in their environment, the use of field work in teaching elementary science, and the study of ecological principles related to bio-conservation. (This course, designed for students in The School of Education seeking certification in elementary education, will not satisfy science requirements for degrees in other schools of the University.) PREREQUISITE: Biology 2001.
Two lecture, two laboratory hours per week.
- 2260. Hydroponics.** (2). (225)
A study of the techniques used in growing higher plants in nutrient solutions. PREREQUISITE: Biology 1200 and 1600.
One lecture, two laboratory hours per week.
- 3000. Nature Study and Bio-Conservation.** (3). (303)
Designed to stimulate an interest in living things in their environment and to encourage the use of field work in teaching nature study and conservation in the elementary school.
Two lecture, two laboratory or field hours per week.
- 3050. General Ecology.** (4). (352)
The study of plant and animal communities in relation to their environment. PREREQUISITES: Biology 1200 and 1600, or the equivalent.
Two lecture, four laboratory hours per week.
- 3070. Genetics.** (4). (300)
A study of the principles of heredity, including laboratory experiments in Drosophila breeding. PREREQUISITES: Biology 1200 and 1600, or the equivalent.
Two lecture, four laboratory hours per week.

- 3100. History of Biology. (3). (315)**
The development of the science of biology, considering the work of outstanding biologists and the influence of their contributions. PREREQUISITE: 8 semester hours in biology.
- 3170. Heredity. (3). (301)**
The principles of heredity with applications to human problems, designed for non-science majors and recommended for students who desire a better understanding of heredity and eugenics. Not acceptable as credit toward a biology major.
Three lecture-discussion hours per week.
- 3240. Field Botany. (4). (304)**
Observation, classification, and mounting of representative specimens of flowering plants in the Memphis area. PREREQUISITE: Biology 1200 or the equivalent.
Two lecture, four laboratory hours per week.
- 3400. The Relation of Microorganisms to Man. (3). (330)**
The nature and activities of the microorganisms as they affect the welfare of man; some time is devoted to the pathogens—etiology and transmission of diseases, immunity, and other factors bearing upon the health of the individual and the community. Designed for non-science majors.
- 3500. General Bacteriology. (4). (302)**
A general course dealing with the fundamentals of bacteriology. PREREQUISITE: one year of biology or one year of chemistry.
Two lecture, four laboratory hours per week.
- 3570. Microbial Genetics. (3). (322)**
A study of genetics of microorganisms; identification of hereditary determinants, methods of replication and transmission, and control over metabolism and development. PREREQUISITE: Biology 3500 or the equivalent.
Two lecture, two laboratory hours per week.
- 3600. Ornithology. (4). (340)**
A study of the habitats, migrations, nesting habits, and classification of birds. Field trips for recognition of the more common local birds will be organized as needed. PREREQUISITE: Biology 1600, or the equivalent.
Two lecture, four laboratory hours per week.
- 3610. Vertebrate Embryology. (4). (332)**
The development of selected vertebrate embryos from the fertilized egg cell. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.
- 3620. Comparative Anatomy of Vertebrates. (5). (331)**
The origin, development, structure, and functions of the organs and systems of selected forms of vertebrates. PREREQUISITE: Biology 1600, or the equivalent.
Two lecture, six laboratory hours per week.
- 3630. The Physiology of Exercise. (3). (344)**
The anatomy and physiology of muscular movement. PREREQUISITES: Biology 1631 and 1632, or the equivalent.
Three lecture-demonstration hours per week.

- 3730. Animal Physiology.** (4). (341)
 A study of the essential functions of living organisms, considering necessary structural relationships and emphasizing the normal function of the human body. PREREQUISITES: Biology 1600 (or the equivalent) and one year of chemistry.
Three lecture, two laboratory hours per week.
- 3800. Parasitology.** (4). (361)
 Distribution, morphology, life history, economic importance, and control of some of the parasites of man and domestic animals: Protozoa through helminths. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.
- 3900. General Entomology.** (3). (311)
 An introduction to the insects with emphasis on morphology, physiology, development, behavior, and ecology. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, two laboratory hours per week.
- 3920. Insect Morphology.** (4). (314)
 A study of the form and structure of insects, considering both external and internal morphology. PREREQUISITE: Biology 1200 and 1600, or the equivalent.
Two lecture, four laboratory hours per week.
- 3930. Introduction to Insect Physiology.** (3).
 A study of physiology as applied to the life processes of insects. PREREQUISITE: Biology 3920 or the equivalent.
Two lecture, two laboratory hours per week.
- 3940. Systematic Entomology.** (3). (312)
 Classification of the insects, the interpretation and use of keys, and the preparation of a representative collection. PREREQUISITE: Biology 1600 or the equivalent.
One lecture, four laboratory hours per week.
- 3960. Medical Entomology.** (4). (362)
 Distribution, morphology, life history, economic importance, and control of some of the insects and other arthropods which are parasites or serve as vectors for disease-producing organisms. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.
- 4000. Problems in Biology.** (2 to 4). (400)
 Individual problems pursued by qualified students under supervision of a member of the biology faculty, designed to develop interest and proficiency in biological research.
- 4030. Cellular Physiology.** (4). (450)
 A study of the fundamental unit of all living things, considering the basic activities of cells: nutrition, adaptation, growth, and reproduction. PREREQUISITE: Biology 3730 or the equivalent.
Two lecture, four laboratory hours per week.
- 4100. Organic Development.** (3). (410)
 The consideration of theoretical and scientific evidences concerning the origin, development, and establishment of the major groups of living and extinct animals and plants. Recommended for biology majors and general students as well. PREREQUISITE: One year of biology.

- 4221. Plant Morphology. (4). (401)**
Comparative studies of general structure of lower plants, exclusive of bacteria and related forms, through the Bryophytes. PREREQUISITE: Biology 1200 or the equivalent.
Two lecture, four laboratory hours per week.
- 4222. Plant Morphology. (4). (402)**
A continuation of Biology 4221, considering the vascular plants. PREREQUISITE: Biology 1200 or the equivalent.
Two lecture, four laboratory hours per week.
- 4231. Physiology of the Lower Plants. (4). (426)**
A study of the principles of physiology and their application to the lower plant groups, exclusive of the bacteria and related forms. PREREQUISITE: permission of the instructor.
Two lecture, four laboratory hours per week.
- 4232. Plant Physiology. (4). (425)**
Principles of physiology and their application to the living organism, with emphasis on higher plants. PREREQUISITE: permission of the instructor.
Two lecture, four laboratory hours per week.
- 4240. Plant Taxonomy. (4). (420)**
Principles of plant taxonomy, with special attention given to the classification of selected vascular plant families. PREREQUISITE: permission of the instructor.
Lectures, laboratory hours, and field trips.
- 4260. Histological Technique. (3). (404-A)**
A study of the methods of preparing plant tissues for microscopic study; theories of staining and preparation of permanent mounts. Credit not allowed for both 4260 and 4660. PREREQUISITE: Biology 1200, or consent of instructor.
One lecture, four laboratory hours per week.
- 4360. Plant Pathology. (4). (442)**
A study of the bacteria, fungi, viruses, menatodes, parasitic seed plants, and environmental unbalance as the casual agencies of plant diseases. PREREQUISITES: 8 semester hours of biology, including Biology 1200.
Two lecture, four laboratory hours per week.
- 4400. Advanced Microbiology. (4).**
Advanced theory and principles of microbiology with emphasis on morphology and bacterial metabolism. PREREQUISITE: Biology 3500 and one year of introductory biology, one year of inorganic chemistry, with organic chemistry desirable.
Two lecture, four laboratory hours per week.
- 4440. Determinative Bacteriology. (4).**
Methods of bacteriological technique, pure culture studies, and classification of bacteria. PREREQUISITE: Biology 3500, one year of introductory biology, one year of inorganic chemistry, with organic chemistry desirable.
Two lecture, four laboratory hours per week.
- 4460. Sanitary Bacteriology. (4). (405)**
A study of microorganisms in relation to water and sewage; disinfection and disinfectants. PREREQUISITE: Biology 3500 or the equivalent.
Two lecture, four laboratory hours per week.

- 4560. Microbiology of Foods.** (4). (406)
 Microorganisms in natural and processed foods; origins, nature, and effects on foods; enumeration; and the relation to health. PREREQUISITE: Biology 3500 or the equivalent.
Two lecture, four laboratory hours per week.
- 4620. Vertebrate Histology.** (4). (403)
 Microscopic study of normal tissues and organs of the vertebrate body. PREREQUISITE: Biology 3620 or 3730.
Two lecture, four laboratory hours per week.
- 4640. Field Zoology.** (4). (440)
 Field study of the identification, life history, and habitat of the animals of this locality; birds and insects are omitted. PREREQUISITE: 8 semester hours of biology, including Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.
- 4660. Histological Technique.** (3). (404-B)
 Methods of preparing animal tissues for microscopic study; theories of staining and preparation of permanent mounts. Credit not allowed for both 4260 and 4660. PREREQUISITE: Biology 1600 or consent of the instructor.
One lecture, four laboratory hours per week.
- 4720. Comparative Neurology.** (4). (460)
 A detailed study of the nervous system of selected animals with emphasis on the vertebrates. PREREQUISITE: permission of the instructor.
Two lecture, four laboratory hours per week.
- 4840. Invertebrate Zoology.** (4). (430)
 The invertebrate animals, exclusive of the insects, with special attention given to phylogeny, organology, and taxonomy. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

- 5100. Modern Biological Methods.** (2). (S-530)
 A consideration of recent development in biological techniques which may be applied to the study of living organisms.
- 5840. Protozoology.** (4). (S-560)
 A survey of the free living and parasitic protozoa, with consideration given to structure, taxonomy, habitat, and life history. PREREQUISITE: Biology 1600 or the equivalent.
Two lecture, four laboratory hours per week.

GRADUATE COURSES IN BIOLOGY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

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|---|---------|
| 6030. Cellular Physiology. (4). | (G-450) |
| 6100. Organic Development. (3). | (G-410) |
| 6221. Plant Morphology. (4). | (G-401) |
| 6222. Plant Morphology. (4). | (G-402) |
| 6231. Physiology of the Lower Plants. (4). | (G-426) |
| 6232. Plant Physiology. (4) | (G-425) |
| 6240. Plant Taxonomy. (4). | (G-420) |

6260.	Histological Technique.	(3).	(G-404-A)
6360.	Plant Pathology.	(4).	(G-442)
6400.	Advanced Microbiology.	(4).	(515)
6440.	Determinative Bacteriology.	(4).	(505)
6460.	Sanitary Bacteriology.	(4).	(G-405)
6560.	Microbiology of Foods.	(4).	(G-406)
6620.	Vertebrate Histology.	(4).	(G-403)
6640.	Field Zoology.	(4).	(G-440)
6660.	Histological Technique.	(3).	(G-404-B)
6720.	Comparative Neurology.	(4).	(G-460)
6840.	Invertebrate Zoology.	(4).	(G-430)
7000.	Seminar In Biological Literature.	(2).	(510)
7030.	Cytology.	(3).	(550)
7091.	Special Problems.	(4).	(591)
7092.	Research.	(2 to 4).	(590)
7100.	Modern Biological Methods.	(2).	(530)
7200.	Seminar in Botany.	(3).	(513)
7250.	Advanced Plant Ecology.	(3).	(552)
7330.	Intermediary Plant Metabolism.	(3).	
7500.	Virology.	(3).	
7530.	Bacterial Physiology.	(4).	(G-415)
7600.	Seminar in Zoology.	(3).	(514)
7840.	Protozoology.	(4).	(560)
7940.	Advanced Systematic Entomology.	(3).	(512)
7960.	Applied Entomology.	(3).	
7996.	Thesis.	(6).	(596)

CHEMISTRY AND PHYSICS

PROFESSOR JESSE WELLS FOX, *Chairman*

Room 121, Manning Hall

PROFESSORS CLAYPOOL, HOLMES, IJAMS, and SCHIRMER

ASSOCIATE PROFESSORS ALLBRITTON, HAYES, MARSHALL, and ROBINSON

ASSISTANT PROFESSORS CALLOWAY, ESTES, KARRAKER, MARKS, NEMITZ,

O'KELLEY, SPELL, WATSON, and WOOLLETT

MR. SCHWAIGER

The Department of Chemistry and Physics offers majors and minors in chemistry, physics, and physical science; requirements are listed on page 111. The Department also offers the professional degree of Bachelor of Science in Chemistry, details of which are outlined on page 105. This program is designed to meet the requirements of the Committee on Professional Training of the American Chemical Society. Students completing this program may go directly into positions in the chemical industry or may enroll for graduate study in chemistry, leading to research positions, college teaching, or other positions requiring an advanced degree. Information concerning pre-professional curricula will be found on page 102. The program for the degree of Bachelor of Science in Medical Technology is outlined on page 109.

SEQUENCE OF COURSES

Students who have not successfully completed a high school course in chemistry (or those who have an evident deficiency) should enroll in Chemistry 1100, credit for which will not apply toward any major or

minor in this department. Students who present high school credit in chemistry, or those who have credit in Chemistry 1100, will begin with either Chemistry 1051 or Chemistry 1111 (Chemistry 1051 and 1052 are designed to meet graduation requirements for students who wish to take only one year of college chemistry; students who plan to take *more* than one year of college chemistry and who meet the qualifications outlined above should enroll in Chemistry 1111.) Students with credit in Chemistry 1052 must take Chemistry 1112 (as duplicate credit) before they are eligible to enroll in any higher numbered chemistry course.

ADVANCED PLACEMENT

Beginning students who have had high school chemistry and who have had advanced training in summer institutes, research participation projects, advanced high school chemistry courses, etc., are invited to apply, during the semester preceding enrollment, to the chairman of the Department of Chemistry and Physics for advanced placement. If previous experience and grades on a qualifying examination merit consideration, grades will be given on beginning courses for which examinations are satisfactorily completed. For further details of advanced placement, see page 82.

CHEMISTRY

1000. Chemistry for Nurses. (4). (100s)

A study of the application of chemistry in health and disease, designed to meet the need of students who plan to enter the nursing profession. Approximately one-half of the semester is allocated to general chemistry, one-fourth to organic chemistry, and one-fourth to biochemistry.

Three lecture, two laboratory hours per week.

1051. Elementary Chemistry. (4).

A study of the chemistry of the more important elements and compounds, designed for students who do not expect to take more than two semesters of chemistry. *This course will not be credited toward a major or minor in chemistry or physics.*

Three lecture, two laboratory hours per week.

1052. Elementary Chemistry. (4).

A continuation of Chemistry 1051, including the more important compounds of carbon as found in petroleum, foods, fabrics, etc. *This course will not be credited toward a major or minor in chemistry or physics.* PREREQUISITE: Chemistry 1051.

Three lecture, two laboratory hours per week.

1100. Introduction to Chemistry. (2). (110)

Designed for students whose curriculum requires Chemistry 1111 and 1112 but whose previous chemistry background is inadequate for enrollment in Chemistry 1111. Stress is placed on Scientific calculations and the properties of matter. *Credit in this course will not apply toward a major or minor in chemistry, physics, or physical science, nor will it satisfy any part of the science requirements for any degree.* COREQUISITE: Mathematics 1211 or 1212 is recommended.

Two lectures per week.

1111. General Chemistry. (4). (111)

The basic course and a prerequisite for all higher-numbered courses in chemistry, covering atomic structure and its relationship to the physical and chemical properties of the elements, the states of matter,

properties of gases and solutions, oxidation-reduction reactions, acid-base reactions, colloids, and a study of the periodic relationships of elements. Required of all chemistry and physics majors and minors and of students following pre-professional curricula in medicine, dentistry, pharmacy, engineering, and medical technology. PREREQUISITE: One unit in high school chemistry or credit in Chemistry 1100. COREQUISITE: Mathematics 1211 or 1212.

Three lecture, three laboratory hours per week.

1112. General Chemistry. (4).

(112)

A continuation of Chemistry 1111, covering the chemistry of more important metals, chemical equilibrium and the Law of Mass Action, electrochemistry, oxidation potentials, and chemistry of some of the more important non-metals. The laboratory is elementary qualitative analysis. PREREQUISITES: Chemistry 1052 or 1111, and Mathematics 1211 or 1212.

Three lecture, three laboratory hours per week

2000. Elementary Quantitative Analysis for Biological Sciences. (4).

(200)

Designed for students in the biological sciences, with stress on the care and use of the analytical balance and the theory and practice of volumetric analysis and colorimetry. *Credit in this course will not apply toward a major in chemistry.* PREREQUISITE: Chemistry 1112.

Three lecture, four laboratory hours per week.

2010. Elementary Physical Chemistry. (4).

(201)

A brief course in physical chemistry, designed primarily for students who will continue their studies in biochemistry, medicine, and biology; recommended for those planning to teach the physical sciences in secondary schools who do not have the mathematics required for Chemistry 3411. *Credit in this course will not apply toward a major in chemistry or physics.* PREREQUISITES: Chemistry 2000 or 2200, and Physics 2111 or 2511.

Three lecture, three laboratory hours per week.

2200. Quantitative Analysis. (4).

(220)

The theory and practice of gravimetric and titrimetric quantitative chemical analysis, with stress on principles and techniques of gravimetry, titrimetry, and stoichiometry. Laboratory work includes the use of the analytical balance, and preparation of standard solutions, and the analysis of samples. PREREQUISITES: Chemistry 1112 and Mathematics 1211 or 1212.

Two lecture, six laboratory hours per week.

3211. General Organic Chemistry. (4).

(321)

A systematic study of the preparations and properties of organic compounds and their interpretation according to modern theories of organic chemistry. Particular emphasis will be placed on aliphatic and aromatic hydrocarbons, their halogen derivatives, and alcohols. PREREQUISITE: Chemistry 1112; Chemistry 2010 or 2200 is recommended.

Three lecture, three laboratory hours per week.

3212. General Organic Chemistry. (4).

(322)

A continuation of 3211, with emphasis on the more important functional derivatives of aliphatic and aromatic hydrocarbons. PREREQUISITE: Chemistry 3211.

Three lecture, three laboratory hours per week.

- 3411. Physical Chemistry. (4).** (341)
 The fundamental principles of physical chemistry, including kinetic theory, thermo-chemistry, the laws of thermodynamics, solutions, and phase equilibria. PREREQUISITES: Chemistry 2000 or 2200; Physics 2112 or 2512; Mathematics 2321.
Three lecture, three laboratory hours per week.
- 3412. Physical Chemistry. (4).** (342)
 A continuation of Chemistry 3411, considering such topics as irreversible processes, electromotive force, ionic equilibria, quantum theory, molecular structures, crystals, and surface chemistry. PREREQUISITE: Chemistry 3411.
Three lecture, three laboratory hours per week.
- 4011. Biochemistry. (4).** (401)
 An elementary course dealing principally with chemistry of carbohydrates, proteins, lipids, vitamins, etc., digestion and absorption, with consideration also given to certain physico-chemical topics including the colloidal state, colligative properties, equilibria and buffer mechanisms, and the electrolyte structure of body fluids. PREREQUISITE: Chemistry 3212.
Two lecture, four laboratory hours per week.
- 4012. Biochemistry. (4).** (402)
 The topics include blood and other tissues, the excretions, energy metabolism, intermediary chemical metabolism. PREREQUISITE: Chemistry 4011.
Two lecture, four laboratory hours per week.
- 4200. Advanced Analytical Chemistry. (3).** (420)
 An advanced treatment of the theory and calculations of gravimetric and titrimetric analysis. PREREQUISITE: Chemistry 3412, or permission of the instructor.
Three lecture hours per week.
- 4210. Advanced Inorganic Chemistry. (3).** (421)
 A presentation of modern inorganic chemistry with emphasis on bonding and structure and their relationship to the properties of inorganic compounds. Periodicity, the principles of acid-base behavior, oxidation potentials, inorganic complex compounds, and non-aqueous solvents are included. PREREQUISITE: Chemistry 3412, or permission of the instructor.
Three lecture hours per week.
- 4220. Instrumental Analysis. (3).** (422)
 The theory and application of the principles of electrometric, spectrophotometric and chromatographic methods to the collection and interpretation of physical chemical data as well as the application of such methods to analysis. The techniques include potentiometry; conductiometry; voltammetry; visible, ultraviolet, and infrared spectrophotometry; and paper, column, and gas chromatography. PREREQUISITES: Chemistry 3412 and 4200.
One lecture, six laboratory hours per week.
- 4310. Organic Qualitative Analysis. (3).** (431)
 Characterization of known and identification of unknown, pure organic compounds by solubility tests, class reactions, specific test reagents, and the preparation of derivatives. PREREQUISITES: Chemistry 2200 and Chemistry 3212.
One lecture, six laboratory hours per week.

- 4900. Chemical Literature. (1).** (490)

Use of the chemical literature and the writing of technical reports.
PREREQUISITE: junior standing in chemistry.

One lecture hour per week.

- 4910. Seminar. (1).** (491)

Special projects, reports and investigation of current chemical literature. PREREQUISITE: Chemistry 4900.

One lecture hour per week.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

- 5010. Principles of Chemistry. (3).** (S501-I)

This course is intended to acquaint the teacher of high school chemistry with a modern approach to the principles of chemistry, including atomic structure, chemical bonding, the periodic classification of the elements as it relates to their properties, chemical equilibrium and the law of mass action, ionic equilibria, electrochemistry, oxidation potentials, and an introduction to nuclear chemistry. Problems illustrating the quantitative relationships involved in most of these topics are emphasized. The laboratory will include both qualitative and quantitative analytical techniques. The Chemical Bond Approach materials will be used as a basis for this course. *This course cannot be applied toward a major or minor in chemistry, physics, or physical science.*

Three lecture hours per week.

- 5020. Principles of Organic Chemistry. (3).** (S502-I)

Open only to high school science teachers, this course is the systematic presentation of the fundamental principles of organic chemistry with interpretation of structure and properties in accord with modern atomic and molecular theory. Emphasis is placed upon the sources and uses of organic compounds in our daily lives. Special topics will be developed that will familiarize the high school teacher with the recent advances in the field and areas suitable for special projects for high school students. Laboratory experiments and demonstrations will be developed and performed which may be adapted for use in high school courses. *This course cannot be applied toward a major or minor in chemistry, physics, or physical science.* PREREQUISITE: Two years of college chemistry or Chemistry 5010.

Three lecture hours per week.

- 5030. Analytical Chemistry. (3).** (S503-I)

This course stresses recent analytical methods. It covers the fundamental principles of analytical chemistry including some gravimetric and titrimetric methods but with major emphasis on modern instrumental techniques. These include ultraviolet, visible and infrared spectrophotometry, potentiometric, conductometric, voltametric, and electrolytic methods; and both liquid and gas phase chromatography. *This course cannot be applied toward a major or minor in chemistry, physics, or physical science.* PREREQUISITE: Two years of college chemistry or Chemistry 5010.

Three lecture hours per week.

- 5410. Advanced Physical Chemistry. (3).** (S541)

Thermodynamics in relation to chemical equilibria and reactivity, including such topics as isothermal and adiabatic expansions, cyclic processes, heat content, specific heats, entropy, enthalpy, free energy, and vapor pressures. PREREQUISITES: Chemistry 3412, Mathematics 2322, and permission of department chairman.

PHYSICS

- 1111. Foundations of Physics. (3). (111)**
 A thorough study of certain basic principles of science, with particular stress on the nature of physics, designed for the student who has had no previous training in physics. *Credit in this course will not apply toward a major or a minor in physics, chemistry, or physical science, nor will it satisfy any part of the science requirement in the pre-professional curricula.*
Two lecture, two laboratory hours per week.
- 1112. Foundations of Physics. (3). (112)**
 A continuation of Physics 1111. PREREQUISITE: Physics 1111. *Credit in this course will not apply to a major or a minor in physics, chemistry, or physical science, nor will it satisfy any part of the science requirement in the pre-professional curricula.*
Two lecture, two laboratory hours per week.
- 2111. General Physics. (4). (211)**
 The general physics course, covering the topics of mechanics, heat, and sound; required of all pre-medical, pre-dental, and pre-pharmacy students. PREREQUISITE: Chemistry 1112 and Mathematics 1212.
Three lecture, two laboratory hours per week.
- 2112. General Physics. (4). (212)**
 A continuation of Physics 2111, covering the topics of magnetism, electricity, light, and modern physics. PREREQUISITE: Physics 2111.
Three lecture, two laboratory hours per week.
- 2511. Physics for Science and Engineering. (5). (251)**
 Designed primarily for students intending to major in physics, chemistry, or mathematics; required of all students in the pre-engineering curriculum and recommended for students planning to teach physics in the secondary schools. PREREQUISITES or COREQUISITES: Chemistry 1111 and Mathematics 1321.
Four lecture, two laboratory hours per week.
- 2512. Physics for Science and Engineering. (5). (252)**
 A continuation of Physics 2511. PREREQUISITE: Physics 2511. PREREQUISITES or COREQUISITES: Chemistry 1112 and Mathematics 2321.
Four lecture, two laboratory hours per week.
- 2700. Acoustics of Musical Sounds. (3). (270)**
 Designed primarily for majors in music. *Credit in this course will not apply toward a major or minor in chemistry, physics, or physical science, nor will it satisfy any part of the science requirement in the pre-professional curricula.* PREREQUISITE: Mathematics 1181 or 1212.
Three lecture hours per week.
- 3111. Mechanics. (3). (311)**
 An advanced course in classical mechanics covering statistics and dynamics of particles, rigid bodies, fluid flow, work, energy, momentum, force fields, and harmonic motion. Recommended as good preparation for advanced physics courses. PREREQUISITE: Physics 2112 or 2512. COREQUISITE: Mathematics 2322.
Three lecture hours per week.
- 3112. Mechanics. (3). (312)**
 A continuation of Physics 3111. PREREQUISITE: Physics 3111.
Three lecture hours per week.

- 3211. Electricity and Magnetism. (4).** (321)
An advanced course in electricity and magnetism covering such topics as magnetostatics, electrostatics, d.c. and a.c. circuits, electromotive force, thermal effect, electronic theory, and field theory. PREREQUISITE: Physics 2112 or 2512. COREQUISITE: Mathematics 2322.
Three lecture, three laboratory hours per week.
- 3212. Electricity and Magnetism. (4).** (322)
A continuation of Physics 3211. PREREQUISITE: Physics 3211.
Three lecture, three laboratory hours per week.
- 3510. Electronics. (4).** (351)
Theory and applications of electronic devices such as vacuum and gas-filled tubes, photoelectric cells, and semiconductors, with particular emphasis on basic electronic circuitry and laboratory instrumentation. PREREQUISITES: Physics 2112 or 2512, and Physics 3211.
Three lecture, three laboratory hours per week.
- 4050. Astronomy. (3).** (405)
A survey course considering practical astronomy, the principal constellations, the solar system, the structure of the galaxy, theories of stellar evolution. PREREQUISITE: Mathematics 1212.
Three lectures per week, and occasional observation periods.
- 4111. Atomic and Nuclear Physics. (4).** (411)
A study of atomic structure and behavior, the interaction of atomic particles, nuclear structure, and subatomic particles, radiation and its properties and origin, with some consideration of applications of recent developments in physics. PREREQUISITES: Physics 2112 or 2512; Mathematics 2322.
Three lecture, three laboratory hours per week.
- 4112. Atomic and Nuclear Physics. (4).** (412)
A continuation of Physics 4111. PREREQUISITE: Physics 4111.
Three lecture, three laboratory hours per week.
- 4211. Optics. (4).** (421)
Geometrical and physical optics including such topics as thin lenses, spherical mirrors, lens aberrations, optical instruments, waves, interference, diffraction, absorption, transmission, and scattering. PREREQUISITES: Physics 2112 or 2512; Mathematics 2322.
Three lecture, three laboratory hours per week.
- 4212. Optics. (4).** (422)
A continuation of Physics 4211. PREREQUISITE: Physics 4211.
Three lecture, three laboratory hours per week.
- 4310. Radioisotope Technology. (3).** (431)
Properties and detection of radiation, production of isotopes, use of detection devices, radiation chemistry, thickness and density gauging, activation analysis, moisture measurement, safety procedures, analytical tracer techniques, industrial radiography, procurement of radioisotopes and radioisotope licenses, and design of radiochemical laboratories. PREREQUISITE: college course in physics, chemistry, and mathematics.
Two lecture, two laboratory hours per week.
- 4410. Introduction to Quantum Theory. (3).**
Experimental basis of quantum theory; development of the Schrodinger equation and its solution for simple systems; selected applications in atomic and molecular structure. PREREQUISITE: Physics 4111 or consent of instructor. COREQUISITE: Mathematics 4391.
Three lecture hours per week.

4510. Thermodynamics. (3). (451)

A mathematical treatment of thermodynamics, including such topics as work, energy, enthalpy, entropy, reversible and irreversible processes, equilibria, specific heats, and phase transitions. PREREQUISITES: Physics 2112 or 2512; Mathematics 2322.

Three lecture hours per week.

4610. Solid State Physics. (3).

Consideration of such topics as lattice vibrations, specific heats, conduction metals and semiconductors, magnetism. PREREQUISITES: Mathematics 2322, Physics 3212. COREQUISITE: Physics 4111.

Three lecture hours per week.

(*The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.*)

5010. General Physics for High School Teachers. (3). (S501-I)

The materials developed by the Physical Science Study Committee for the first semester of high school physics, with additional instruction and experiments as related to this study, will be presented. A general introduction to the fundamental physical concepts of time, space, matter, optics, and waves will be presented. A discussion of the PSSC text, the PSSC laboratory, together with films and other materials will be included. *This course cannot be applied toward the major or minor in chemistry, physics, or physical science.*

Three lecture hours per week.

5020. Fundamental Concepts of Contemporary Physics for High School Teachers. (3). (S502-I)

This course will be a continuation of Physics 5010 and will include the materials developed by the Physical Science Study Committee for the second semester of high school physics, with supplemental experiments, classroom discussions and assignments. Mechanics, from a dynamical point of view, the laws of conservation of momentum and of energy, fundamental concepts of electricity and magnetism, and atomic structure will be emphasized. *This course cannot be applied toward a major or minor in chemistry, physics, or physical science.*

Three lecture hours per week.

5030. Selected Topics in Modern Physics for High School Teachers. (3). (S503-I)

Some of the more advanced topics of atomic and nuclear physics, together with the basic concepts of solid state physics, electronics, and space technology will be presented. Laboratory experience with some of the more advanced electronic and nuclear equipment will be provided. *This course cannot be applied toward a major or minor in chemistry, physics, or physical science.*

Three lecture hours per week.

PHYSICAL SCIENCE

1031. Principles of Physical Science. (3).

Fundamental principles and concepts of chemistry and physics related to the understanding and teachings of physical science. (*This course, designed for students in The School of Education seeking certification in elementary education, will not satisfy science requirements for degrees in other schools of the University.*)

Three lecture, two laboratory hours per week.

1032. Principles of Physical Science. (3).

Principles and concepts of astronomy, meteorology, and geology related to the understanding and teaching of physical science. PRE-REQUISITE: Physical Science 1031 .(This course, designed for students in The School of Education seeking certification in elementary education, will not satisfy science requirements for degrees in other schools of the University.)

Three lecture, two laboratory hours per week.

4050. Glass Manipulation. (2).

(Chem. 405)

A laboratory course in the fundamentals of glass manipulation and the construction and repair of simple laboratory apparatus. PRE-REQUISITE: Senior standing.

Six laboratory hours per week.

4070. General Science for High School Teachers. (3). (407-I)

A study of the fundamental principles of astronomy, chemistry, geology, and physics as they relate to the understanding and teaching of general science. Classroom experiments and demonstrations will be included.

(The following is a graduate course for which undergraduates within 36 semester hours of graduation may enroll.)

5040. Astronomy. (3).

(S501-I)

A course in astronomy open to junior and senior high school teachers of science.

**GRADUATE COURSES IN CHEMISTRY, PHYSICS,
AND PHYSICAL SCIENCE**

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

CHEMISTRY

6011. Biochemistry. (4).	(G-401)
6012. Biochemistry. (4).	(G-402)
6200. Advanced Analytical Chemistry. (3).	(G-420)
6220. Instrumental Analysis. (4).	(G-422)
6310. Organic Qualitative Analysis. (3).	(G-431)
6900. Chemical Literature. (1).	
7010. Principles of Chemistry. (3).	(501-I)
7020. Principles of Organic Chemistry. (3).	(502-I)
7030. Analytical Chemistry. (3).	(503-I)
7111. Advanced Inorganic Chemistry. (3).	(511)
7112. Advanced Inorganic Chemistry. (3).	(512)
7210. Principles of Analytical Chemistry. (3).	(521)
7310. Advanced Organic Chemistry. (3).	(531)
7330. Organic Preparations. (3).	(533)
7360. Chemistry of Natural Products. (3).	(536)
7410. Advanced Physical Chemistry. (3).	(541)
7910. Special Problems in Chemistry. (3)	
7913. Chemistry Seminar. (1).	
7923. Chemistry Seminar. (1).	
7933. Chemistry Seminar. (1).	
7943. Chemistry Seminar. (1).	
7996. Thesis. (6).	(596)

PHYSICS

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| 6111. Atomic and Nuclear Physics. (4). | (G-411) |
| 6112. Atomic and Nuclear Physics. (4). | (G-412) |
| 6211. Optics. (4). | (G-421) |
| 6212. Optics. (4). | (G-422) |
| 6310. Radioisotope Technology. (3). | (G-431) |
| 6450. Thermodynamics. (3). | (G-451) |
| 7010. General Physics for High School Teachers. (3). | (501-I) |
| 7020. Fundamental Concepts of Contemporary Physics for High School Teachers. (3). | (502-I) |
| 7030. Selected Topics in Modern Physics for High School Teachers. (3). | (503-I) |

PHYSICAL SCIENCE

- | | |
|---|---------------|
| 6050. Glass Manipulation. (2). | (Chem. G-405) |
| 6070. General Science for High School Teachers. (3). | (407-I) |
| 7040. Astronomy. (3). | (501-I) |

CLASSICAL LANGUAGES

PROFESSOR ROY E. WATKINS, *Chairman*
Room 215, Jones Hall

Requirements for the major and minor in Latin are listed on page 110.
 Details of the foreign language requirements for the baccalaureate degrees will be found on page 112.

CLASSICS

- 3021. Latin and Greek Etymology.** (3). (323)
 Origin and derivation of words, especially those used in medicine and science. This course is given in English and is open to all students without prerequisite. It may not be used to satisfy any part of the foreign language requirement nor does it apply toward a major in classical languages.

GREEK*

- 1101. Elementary Greek.** (3). (111)
 Elements of Greek grammar and syntax; practice in reading and translation.
- 1102. Elementary Greek.** (3). (112)
 Completion of basic grammar and syntax, with additional readings.
- 2201. Xenophon.** (3). (211)
 Reading and interpretation of Xenophon's *Anabasis*.
- 2202. Homer.** (3). (212)
 Reading and interpretation of Book IX of Homer's *Odyssey*.
- 3111. Herodotus.** (3). (311)
 Reading and analysis of Books VI-VIII of Herodotus' *History*.
- 3511. Euripides.** (3). (321)
 Reading and analysis of the dramas *Alcestis* and *Medea*.
- 3911. Plato's *Apology, Crito*.** (3).
 Reading and analysis of the dialogues of Plato which give a prelude to the death of Socrates.
- 3912. Plato's *Republic*.** (3).
 Reading and analysis of selected books of Plato's *Republic*.

LATIN

- 1101. Elementary Latin.** (3). (111)
Elements of grammar; practice in Latin composition and translation.
- 1102. Elementary Latin.** (3). (112)
Completion of elementary Latin grammar, with additional readings.
- 2201. Caesar.** (3). (211)
Reading and analysis of Caesar's *Gallic Wars*, Books I, IV, V.
- 2202. Cicero.** (3). (212)
Reading and analysis of selected orations of Cicero.
- 3111. Livy.** (3). (311)
Reading and analysis of Livy's *History*, Books XXI, XXII.
- 3211. Vergil.** (3). (352)
Reading and analysis of the *Aeneid*.
- 3411. Pliny, Martial.** (3). (362)
Reading and analysis of the *Letters* of Pliny and the *Epigrams* of Martial.
- 3611. Horace's Satires.** (3). (312)
- 3811. Ovid.** (3). (351)
Reading and analysis of myths in Ovid's *Metamorphoses*.
- 3911. Lucretius.** (3). (321)
Reading and analysis of Roman philosophy in Lucretius' *De Rerum Natura*, Books I and III.
- 3912. Cicero.** (3). (361)
Reading and analysis of *De Amicitia* and *De Senectute*.
- 4411. Roman Letter Writers.** (3). (413)
Reading and analysis of Cicero's *Letters*.
- 4611. Roman Satire.** (3). (421)
Reading and analysis of Juvenal's *Satires*.
- 4711. Catullus, Horace.** (3). (411)
Reading and analysis of Catullus' *Lyric Poems* and Horace's *Odes*.

CURRICULUM AND INSTRUCTION

PROFESSOR HEBER ELIOT RUMBLE, *Chairman*
Room 416A, Education Building

PROFESSORS BROWNLEE, JOHNSON, NOTHERN, RICHARDSON,
and UNDERWOOD

ASSOCIATE PROFESSORS COBB, KRAUSE, SHUBKAGLE, and SMITH

ASSISTANT PROFESSORS COURY, DAVIS, DOWD, FISHER, HANKINS, MOORE,
NELMS, POWELL, RAUHOF, STEPHENSON, THOMPSON, and TORBET

MRS. ALGEE, MRS. HENRY, MRS. MAHOOD,
and MRS. RICHARDSON

The Department of Curriculum and Instruction offers majors in elementary education and secondary education and minors in elementary education, library service, secondary education, and special education; the requirements are listed on page 138.

EDUCATION

- 2011. Foundations of Educational Thought and Practice.** (3). (203)
An overview of the whole field of education, with emphasis on those things a prospective teacher should know at the beginning of his professional preparation.
- 2111. Human Growth and Development.** (3). (102)
An attempt to help the student understand child nature and development, to appreciate the fact that all behavior is caused, and to form the habit of seeking bases for both normal and abnormal behavior in situations at home, at school, and in the community.
- 3121. The Psychology of Learning.** (3). (201)
The psychology of learning as applied to activities under the guidance of the school.
- 3211. Materials and Methods, Kindergarten through Third Grade.** (3). (383)
A study of materials and instructional techniques uniquely necessary in working with children in kindergarten through third grade.
- 3241. The Teaching of Reading and the Other Language Arts in the Elementary School.** (3). (385)
A basic course in reading, involving techniques and materials for the teaching of reading and the other communication skills. PREREQUISITES: Education 2011, 2111, and 3121.
- 3251. Teaching Methods in Elementary School Mathematics.** (2). (386)
The mathematical processes required of the elementary school child; reasons for the use of certain methods. PREREQUISITES: Education 2011, 2111, and 3121.
- 3261. Teaching Methods in Elementary School Science.** (2). (386)
A study of the natural environment as a child would view it; activities which challenge a child; reasons for the use of certain methods. PREREQUISITES: Education 2011, 2111, and 3121.
- 3271. Teaching Methods in Elementary School Social Studies.** (2). (387)
A basic course involving methods and materials appropriate to each developmental level of the elementary school child. PREREQUISITES: Education 2011, 2111, and 3121.
- 3301. Teaching Methods in High School Subjects.** (3). (381)
Emphasis is placed on ways in which learning experiences may be organized to insure effective pupil learning. PREREQUISITES: Education 2011, 2111, and 3121
- ***3321. Materials and Methods in High School Art.** (1 or 3). (391A)
- ***3322. Materials and Methods in High School Music.** (1 or 3). (391K)
- ***3331. Materials and Methods in High School Physical Education.** (1 or 3). (391L)
- ***3332. Materials and Methods in High School Health.** (1 or 3). (391Q)
- ***3341. Materials and Methods in High School English.** (1 or 3). (391D)

- *3342. Materials and Methods in High School French. (1 or 3). (391E)
- *3343. Materials and Methods in High School German. (1 or 3). (391F)
- *3344. Materials and Methods in High School Latin. (1 or 3). (391I)
- *3345. Materials and Methods in High School Spanish. (1 or 3). (391O)
- *3346. Materials and Methods in High School Speech. (1 or 3). (391P)
- *3351. Materials and Methods in High School Mathematics. (1 or 3). (391J)
- *3361. Materials and Methods in High School Biology. (1 or 3). (391B)
- *3362. Materials and Methods in High School Physical Science. (1 or 3). (391M)
- *3371. Materials and Methods in High School Social Studies. (1 or 3). (391N)
- *3381. Materials and Methods in Vocational Business Subjects. (1 or 3). (391C-a)
- *3382. Materials and Methods in General Business Subjects. (1 or 3). (391C-b)
- *3383. Materials and Methods in High School Home Economics. (1 or 3). (391G)
- *3384. Materials and Methods in High School Industrial Arts. (1 or 3). (391H)

*NOTE: The methods courses in high school subjects include objectives, content, and grade placement of subject; tools of instruction, organization of courses; teaching procedures and practice. A course may be taken for one hour credit (formerly 391W) only if the student has had, or is enrolled in, Education 3301 and is unable to schedule the methods course for three hours credit before graduation. The course, when taken for one hour credit, requires a conference each week with an instructor competent to provide the necessary special instruction. PREREQUISITES for the courses are: Education 2011, 2111, and 3121.

- 3385. Driver Education and Traffic Safety. (3). (335)
(Same as Industrial Technology 3385.)
Study and practice in the preparation of instructional materials dealing with traffic and safety; care and upkeep of the automobile, and behind-the-wheel instruction. Open only to students whose major or minor is in the Department of Curriculum and Instruction.
Two lecture, two laboratory hours per week.
- 3411. Survey of Preschool Education. (3). (382)
Philosophy and theories of preschool education; physical, emotional, social, and mental development of preschool children; keeping of records; working with parents; selecting equipment and supplies; curriculum content; planning a course of study. PREREQUISITE: Education 2011, 2111, and 3121.

- 3821. Observation, Participation, and Practice in the Elementary School.** (3). (325)
A preparatory course for directed student teaching in the elementary school. PREREQUISITE: Education 2011, 2111, and 3121.
- 3901. Special Problems in Instruction.** (1 to 3). (351)
Individual investigation in the area of instruction. PREREQUISITE: experience as a teacher or satisfactory evidence of being qualified to benefit from such a course.
- 4011. History of Education.** (3). (451)
This course traces through European history some of the more important educational problems of modern times as they have been affected by the social and political facts of history, by the contributions of some of the leading education theorists, and by institutional practices.
- 4012. History of Education in the United States.** (3). (452)
This course aims to trace, describe, and evaluate the development and growth of educational practices, institutions, and theories in the United States from the colonial period to the present.
- 4021. Philosophy of Education.** (3). (453)
A guide to the philosophical treatment of educational problems, designed to develop in the student some facility in critical and systematic thinking.
- 4031. Educational Sociology.** (3). (456)
Group behavior in the educational process; sociological factors involved in the interaction of pupils, teachers, administrators, and community.
- 4112. The Psychology of Adolescence.** (3). (472)
A study of the characteristics of adolescence that should be taken into account in the planning and teaching of secondary school courses, in the supervision of extra-class activities, and in guiding and counseling.
- 4131. Mental Hygiene and the School.** (3). (476)
Guidance in the teacher's own personality development and a study of the mental hygiene of the child as affected by his past and present environment.
- 4174. Supervised Clinical Training in Educational Therapy.** (6). (478)
Practical application of educational activities in the rehabilitation of patients with neuropsychiatric, orthopedic, neurological cardiac, pulmonary, and other general disabilities; included are such procedures as Braille, speech therapy, general educational development, literacy training, and other vocational subjects.
- 4242. Improving the Teaching of Reading.** (3). (446)
Survey of reading methods and research for the person who has had experience in the classroom.
- 4245. The Teaching of Children's Literature in the Elementary School.** (3). (445)
A course designed to improve the methods of teaching children's literature in the elementary school, including units on story telling, dramatization, choral speech work, and the correlation of literature with the content subjects.
- 4252. The Teaching of Modern Mathematics in the Elementary School (Grades 1-8).** (3). (443)
An advanced course acquainting prospective and experienced teachers with the mathematical processes required of the elementary school child and the reasons why certain methods are used.

4262. **The Teaching of Natural Science in the Elementary School.** (3). (442)
An advanced course in the study of the natural environment as a child would view it, including a survey of suitable equipment and materials for the elementary classroom and limited experience as carrying on experiments at the child's level.
4272. **The Teaching of the Social Studies in the Elementary School.** (3). (444)
An analysis of social problems, needs, and interests which are basic to the curriculum of the elementary school child, with emphasis on the role of the social studies and their relationship to the total school program.
4301. **Audio-Visual Aids to Teaching.** (3). (466)
Effectiveness and utilization of audio-visual materials in the school program; technical and administrative problems of integrating audio-visuals into the school curriculum. Opportunities will be provided to develop skills in the use of materials and equipment.
4421. **Curriculum Problems and Trends in the Elementary School.** (3). (462)
This course deals with general educational objectives and means of achieving them; the roles of the various school subjects and their interrelationship; and the organization and use of units of work in the core curriculum.
4441. **Curriculum Problems and Trends in the Secondary School.** (3). (461)
This course is designed to afford some help in the clarification of secondary school educational purposes and in determination of appropriate learning activities; it deals with the functional teaching objectives, ways of obtaining these objectives, methods of establishing relationships among the school subjects, developing the core curriculum, and the organization and use of units of work.
4611. **Procedures, Administration, and Organization of Guidance Services in Schools.** (3). (471)
Historical background and growth of the guidance movement; sociological, psychological, and educational foundations; functions, scope, organization and administration of guidance services; duties and responsibilities of administrators, teachers, and specialists in guidance programs.
4691. **Supervised Practicum in Counseling.** (3). (479)
Classroom instruction and practical experience to prepare upper-classmen to serve as counselors in dormitory situations. PREREQUISITE: Consent of the Dean of Women.
4701. **Workshop in the Improvement of Instruction.** (3). (431)
This course is designed to assist both in-service and prospective teachers to improve the instruction-learning program; attention is given to the purposes of education, classroom learning, motivation of learning, utilization of materials, evaluation of teaching and learning, etc., and to the application of these elements in the several instructional areas of the elementary school and in the particular subject areas of the secondary school.
4721. **Workshop for Teachers in the Elementary School.** (3 to 6). (429)
A course designed to meet the needs of in-service teachers by offering an opportunity to work cooperatively on problems which are real to

teaching situations and which meet the needs of the individual. PRE-REQUISITE: teaching experience and permission of the director of the workshop.

- 4741. Materials and Methods of Teaching High School ____.** (492)
A workshop in teaching methods in a specified endorsement area.
- 4751. Workshop in the Reading Program.** (3 to 6). (448)
Through the media of group study, discussion, demonstrations, directed observation, and laboratory work, participants will formulate plans for reading programs, including content, methods and techniques, materials, and evaluative criteria.
- 4761. Aerospace Education in Schools.** (3). (435)
The purpose of this course is to provide teachers with aerospace knowledge and experiences and ways of utilizing this knowledge and experience in the classroom.
- 4771. Workshop in the Administration of Guidance Services.** (3). (432)
This course is designed to assist in-service and prospective teachers and administrators in providing more effective guidance services in grades 1 through 12; particular attention will be given to the planning, organizing, and evaluating of such services as inventory, information, counseling, placement, and follow-up.
- 4791. Materials and Methods of Teaching High School ____.** (491)
An advanced course in a specified endorsement area, partly taught by means of televised instruction.
- *4811. Directed Student Teaching in the Kindergarten.** (3 to 6). (423)
Observation of the growth and development of pupils and of methods of teaching; participation in school activities, culminating in assuming responsibility for teaching entire groups.
- *4821. Directed Student Teaching in the Elementary School.** (3 to 9). (425)
Observation of the growth and development of pupils and of methods of teaching; participation in school activities, culminating in assuming responsibility for teaching entire groups.
- *4822. Directed Student Teaching in the Elementary School.** (3 to 6). (426)
For the student who has completed six semester hours or less of student teaching in the elementary school and desires some additional experience.
- *4841. Directed Student Teaching in the Secondary School.** (3 to 9). (415)
Observation of the growth and development of pupils and of methods of teaching; participation in school activities, culminating in assuming responsibility for teaching entire groups.
- *4842. Directed Student Teaching in the Secondary School.** (3 to 6). (416)
For the student who has completed six semester hours or less of student teaching on the secondary level and desires some additional experience.

*For detailed information concerning the requirements for admission to the student teaching program, see page 134.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

5246. **Diagnostic and Remedial Reading in Elementary and Secondary Schools.** (3). (S-541)
An analysis of why certain children fail to read adequately; the development of a program to prevent and correct reading deficiencies.
PREREQUISITES: Education 3241 and 4242 and concurrent teaching or a minimum of one year's classroom experience.
5431. **The Modern Junior High School.** (3). (S-565)
Origin and functions of the junior-high school; prevailing practices in its educational program; suggested improved programs and procedures.
5461. **The Pupil Activity Program.** (3). (S-566)
A study of current philosophy and practice in regard to responsibilities of teachers, supervisors, and administrators for those phases of educational practice which are essential for the educational program but are not considered as part of general classroom procedure.
5511. **Educational Tests and Measurements.** (3). (S-553)
The principles underlying the construction of objective tests and the problems relating to the use and interpretation of school measurements by teachers and administrators; practice in the construction of new-type and essay tests, and in the elements of statistical procedure necessary for the interpretation of school measurements.

GRADUATE COURSES IN EDUCATION

(Numbers beginning with 6 identify courses described in the preceding section and in the section on special education for which graduate credit may be given. For further details of the graduate program, see the Bulletin of The Graduate School.)

6011. **History of Education.** (3). (G-451)
6012. **History of Education in the United States.** (3). (G-452)
6021. **Philosophy of Education.** (3). (G-453)
6031. **Educational Sociology.** (3). (G-456)
6112. **The Psychology of Adolescence.** (3). (G-472)
6131. **Mental Hygiene and the School.** (3). (G-476)
6151. **Education of Exceptional Children.** (3). (G-480)
6161. **Education of the Mentally Retarded Child.** (3). (G-481)
6162. **Education of the Brain-Injured and Cerebral-Palsied Child.** (3). (G-482)
6171. **Education of Hospitalized and Homebound Children.** (3). (G-483)
6172. **Educational and Medical Aspects of Crippling and Special Health Conditions.** (3). (G-484)
6173. **Social Case Work in Education.** (3). (G-485)
6174. **Supervised Clinical Training in Educational Therapy.** (3). (G-478)
6181. **Methods and Materials for Teaching Visually-Handicapped Children.** (3). (G-487)
6182. **Introduction to the Teaching of Braille.** (3). (G-488)
6183. **Advanced Braille.** (3). (G-489)

6242. **Improving the Teaching of Reading.** (3). (G-446)
6245. **The Teaching of Children's Literature in the Elementary School.** (3). (G-445)
6252. **The Teaching of Modern Mathematics in the Elementary School.** (3). (G-443)
6262. **The Teaching of Natural Science in the Elementary School.** (3). (G-442)
6272. **The Teaching of Social Studies in the Elementary School.** (3). (G-444)
6301. **Audio-Visual Aids to Teaching.** (3). (G-466)
6421. **Curriculum Problems and Trends in the Elementary School.** (3). (G-462)
6441. **Curriculum Problems and Trends in the Secondary School.** (3). (G-461)
6611. **Procedures, Administration, and Organization of Guidance Services in Schools.** (3). (G-471)
6701. **Workshop in the Improvement of Instruction.** (3). (G-431)
6721. **Workshop for Teachers in the Elementary School.** (6). (G-429)
6741. **Materials and Methods of Teaching High School —.** (3). (G-492)
6751. **Workshop in the Reading Program.** (3 to 6). (G-448)
6761. **Aerospace Education in Schools.** (3). (G-435)
6771. **Workshop in the Administration of Guidance Services.** (3). (G-432)
6781. **Workshop for Teaching Perceptually Handicapped Children.** (3). (G-439)
6791. **Materials and Methods in Teaching High School —.** (3). (G-491)
6811. **Directed Student Teaching in the Kindergarten.** (3 to 6). (G-423)
6821. **Directed Student Teaching in the Elementary School.** (3 to 9). (G-425)
6822. **Directed Student Teaching in the Elementary School.** (3 to 6). (G-426)
6841. **Directed Student Teaching in the Secondary School.** (3 to 9). (G-415)
6842. **Directed Student Teaching in the Secondary School.** (3 to 6). (G-416)
6881. **Student Teaching with the Educable Mentally Retarded.** (3). (G-427)
6882. **Student Teaching with Pupils who have Crippling and Special Health Conditions.** (3). (G-428)
7011. **Educational Thought.** (3). (501)
7031. **Social Foundations of Education.** (3). (504)
7041. **Comparative Education.** (3). (506)
7121. **Educational Psychology.** (3). (521)
7201. **Modern Methods in Elementary Education.** (3). (557)
7246. **Diagnostic and Remedial Reading in Elementary and Secondary Schools.** (3). (541)
7301. **Modern Methods in Secondary Education.** (3). (558)
7401. **Fundamentals of Curriculum Development.** (3). (561)
7431. **The Modern Junior High School.** (3). (565)

7461.	The Pupil Activity Program.	(3).	(566)
7511.	Educational Tests and Measurements.	(3).	(553)
7521.	Educational Statistics and Research Methodology.	(3).	(536)
7531.	Research in Curriculum and Instructional Problems.	(3).	(562)
7631.	The Group Process as Applied to Guidance.	(3).	(529)
7651.	Diagnostic Techniques in Guidance.	(3).	(527)
7661.	Educational and Occupational Information.	(3).	(528)
7681.	Techniques of Counseling.	(3).	(526)
7691.	Supervised Practicum in School Guidance and Counseling.	(1-3).	(G-479)
7991.	Special Problems in Instruction.	(1-3).	(591A)
7992.	Special Problems in Curriculum.	(1-3).	(591B)
7993.	Special Problems in Guidance.	(1-3).	(591C)
7994.	Special Problems in Special Education.	(1-3).	(591C)
7995.	Thesis. (Minor).	(3).	(593)
7996.	Thesis. (Major).	(6).	(596)

LIBRARY SERVICE

3111.	Books and Related Library Materials for Children.	(3).	(321)
	Primarily a reading course based on materials suitable for elementary school children: leisure-time interests and curricular needs; criteria for evaluating books and related materials such as magazines, phonograph records, radio programs, and films; aids used in their selection; types of literary and informational books, authors, illustrators, and publishers; story-telling and other devices for encouraging reading.		
3121.	Books and Related Library Materials for Young People and Adults.	(3).	(322)
	This course is presented in the same manner as Library Service 321, but is adapted to materials on the junior and senior high school levels; attention is also given to adult books to enable librarians to work more effectively with faculty and community groups.		
3131.	Reference Materials.	(3).	(323)
	A study of reference materials useful in various areas of the elementary and secondary school curriculum; basic reference materials in every general field are studied, thus making the course desirable for teachers as well as librarians; practice in handling reference questions.		
4231.	Organization of Materials.	(3).	(411)
	Instruction and practice in simplified procedures for acquisition, preparation, organization, and circulation of books and related library materials.		
4232.	Cataloging and Classification.	(3).	(412)
	An introduction to the principles of classification of books; simplified techniques of cataloging books and other materials by the abridged Dewey decimal system; the use of printed cards.		
4331.	School Library Administration.	(3).	(421)
	The place of the library in the instructional and guidance program of the school and the philosophy and purposes of libraries and librarianship, including such problems as standards and evaluation, public relations and publicity, support, housing and equipment, training of assistants, and library-study hall relationships; field trips to different types of libraries.		

GRADUATE COURSES IN LIBRARY SCIENCE

(*Graduate credit may be given for the following courses, described in the preceding section. For full details of the graduate program, see the Bulletin of The Graduate School.*)

- | | |
|--|----------------|
| 6231. Organization of Materials. (3). | (G-411) |
| 6232. Cataloging and Classification. (3). | G-412) |
| 6331. School Library Administration. (3). | (G-421) |

SPECIAL EDUCATION

- | | |
|---|--------------|
| 4151. Education of Exceptional Children. (3). | (480) |
| A survey course which deals with the general problems involved in the education of exceptional children. | |
| 4161. Education of the Mentally Retarded Child. (3). | (481) |
| Designed to aid students in understanding the mentally retarded child; basic educational techniques and methods applicable to mentally retarded children. | |
| 4162. Education of the Brain-Injured and Cerebral Palsied Child. (3). | (482) |
| A study of the neurological mechanisms; the types of aphasia and their educational implications and adjustments; the types of cerebral palsy and their educational implications and remedies by use of special methods and materials; other physiological impairments (such as encephalitis) frequently encountered by teachers of special education; an investigation of the most satisfactory educational approaches to the rectification of these conditions. | |
| 4171. Education of Hospitalized and Homebound Children. (3). | (483) |
| Orientation to the general and specific problems of the hospitalized and homebound child. | |
| 4172. Educational and Medical Aspects of Crippling and Special Health Conditions. (3). | (484) |
| A detailed study of the various types of physically disabling conditions (poliomyelitis, cleft palate, arthritis, measles, and other commonly injurious conditions) which cause either temporary or permanent decreases in educational proficiency; special methods of instruction and suitable adaptations of materials for such afflicted children within the framework of the public school organization. | |
| 4173. Social Case Work in Education. (3). | (485) |
| An introductory course designed to acquaint the student with the concepts and principles underlying social case work. | |
| 4181. Methods and Materials for Teaching Visually Handicapped Children. (3). | (487) |
| A course primarily designed for teachers of the partially-seeing and blind within the framework of public schools, consisting of study in the growth and development of visual imbalance, and the environment and educational implications of visual problems; the historical background of special programs in the education of the visually handicapped, and the adaptations of educational methods and materials to the teaching of such handicapped children. | |
| 4182. Introduction to the Teaching of Braille. (3). | (488) |
| A course designed to give the basic fundamentals in Braille instruction, including the introduction of equipment for Braille writing, development of skill in the use of such equipment, the history and | |

development of Braille and other instructional procedures for the blind, and mastery of the Nemeth Code of Mathematics, three-dimensional bulletin boards and equipment, and practicum in the use of these materials.

- 4183. Advanced Braille. (3). (489)**
 A course designed to complete the proficiency in the use of Braille writing by teachers of visually handicapped children. PREREQUISITE: Special Education 4182 or equivalent.
- 4781. Workshop for Teaching Perceptually Handicapped Children. (3). (439)**
 A workshop of teacher-training in the area of perceptually handicapped children, (brain-injured, non-retarded), who demonstrate a learning and/or behavioral disorder due to a minor or moderate neurological impairment.
- 4881. Student Teaching with the Educable Mentally Retarded. (3). (427)**
 Orientation, observation, and teaching with mentally retarded pupils. PREREQUISITE: Education 4841 or 4821.
- 4882. Student Teaching with Pupils who have Crippling and Special Health Conditions. (3). (428)**
 Orientation, observation, and teaching with pupils who have crippling and special health conditions.
 PREREQUISITE: Education 4841 or 4821.

GRADUATE COURSES IN SPECIAL EDUCATION

(*Most of the special education courses described above may be taken for graduate credit; see page 187 of this catalog, and the Bulletin of The Graduate School.*)

DRAMA

(See SPEECH AND DRAMA)

ECONOMICS AND FINANCE

PROFESSOR ROLAND THOMAS MULLINS, *Chairman*
Room 101, The School of Business Administration Building

PROFESSOR WEST

ASSISTANT PROFESSORS HOLLIS, MARTIN, PULLEY, and STUTSMAN

Requirements for the majors and minors in economics and in finance for the Bachelor of Business Administration degree are listed on page 125. Requirements for the major and minor in economics for the bachelor's degree in The School of Arts and Sciences are listed on page 112.

-
- 2110. Principles of Economics I. (3). (211)**
 An introduction to economic concepts and terminology and to the fundamental principles underlying the production, exchange, distribution, and consumption of income and wealth, together with the application of those principles to major contemporary problems. Attention is given to both the neo-classical and the national income methods of economic analysis. PREREQUISITE: 21 hours of college work, including one semester of college math.

- 2120. Principles of Economics II. (3). (212)**
A continuation of Economics 2110. PREREQUISITE: Economics 2110.
- 3110. Economics of Business Enterprise. (3). (312)**
Analysis of the functioning of business enterprise by applying economic theory to the actual problems of business. Analysis techniques are applied to profit, competition, product policy, demand and cost conditions, pricing policies, and capital budgeting. Both semesters. PREREQUISITE: Economics 2120.
- 3210. Labor Economics. (3). (321)**
An introductory course dealing with the principles, history, and theories of labor policies. Both semesters. PREREQUISITE: Economics 2120.
- 3330. Economics of Consumption. (3). (313)**
Analysis of the role of the consumer in the functioning of the economic system and his viewpoint in relation to economic problems affecting his interests. Spring semester. PREREQUISITE: Economics 2120.
- 3410. Economic Development of the United States. (3). (311)**
Analysis of economic growth of the American economy. Emphasis is placed on the factors instrumental in that growth in the various segments of the economy. PREREQUISITE: Economics 2120.
- 3510. Economics of Transportation. (3). (304)**
Development of American transportation system-waterways, highways, railways, and air; characteristics of modern transportation services; rates and rate making; public aid and regulation; economics of transportation. PREREQUISITE: Economics 2120.
- 3610. Money and Banking I. (3). (361)**
Monetary and banking history of leading countries with special emphasis on the theory of money and banking in the United States, deposit and earning operations of individual banks, interbank, and central bank relations. Both semesters. PREREQUISITE: Economics 2120.
- 3710. Investments. (3). (462)**
The principles of investment in stocks and bonds and their application to specific classes of investments. Both semesters. PREREQUISITE: Accounting 2020.
- 4120. Business Cycles and Forecasting. (3). (414)**
Study of factors involved in the movements of business activity; irregular, seasonal, cyclical, and trend; application of the same for forecasting purposes in business. Both semesters. PREREQUISITES: Economics 3610 and Management 3710.
- 4130. Government Regulation and Business Policy. (3). (491)**
A critical study of the impact of legislation and commission regulation on business policies; the effect of tax laws, Securities and Exchange Commission regulation and anti-monopoly legislation, and organizational, financial, and operational aspects of non-utility business enterprises. Both semesters. PREREQUISITE: Economics 2120.
- 4140. Introduction to Business and Economic Research. (3).**
Theory and practice in research techniques. PREREQUISITE: Management 3710.

- 4310. Economy Theory I. (3). (413)**
An introduction to price and distribution theory. Fall semester. PREREQUISITE: Economics 2120.
- 4320. National Income Analysis. (3). (492)**
An examination of the most desirable goals for fiscal policy and the programs that may be followed to attain the various goals, with emphasis on tools available and techniques involved. Spring semester. PREREQUISITE: Economics 3610.
- 4340. Comparative Economic Systems. (3). (412)**
Analytical study of economic problems and the theoretical framework under different economic systems such as capitalism, socialism, communism, with emphasis on the economic problems of U.S.S.R. Fall semester. PREREQUISITE: Economics 2120.
- 4350. International Economics. (3). (493)**
Historical approach to the theory of international trade, with consideration given to the techniques of control over investment and trade, foreign exchange, balance of payments, and world interdependence. Spring semester. PREREQUISITE: Economics 3610.
- 4360. Econometrics. (3).**
An introduction to the application of modern statistical and mathematical methods to economic theory. PREREQUISITES: Economics 2120, and one semester of college math.
- 4410. Development of Economic Thought. (3). (411)**
An analytical and critical study of the development of economic thought. Fall semester. PREREQUISITE: Economics 2120.
- 4420. Current Economic Problems. (3). (494)**
A study of current domestic and international economic problems with special emphasis on international trade, foreign investments, and world economic organization and cooperation. Fall semester. PREREQUISITE: Economics 3610.
- 4610. Money and Banking II. (3). (461)**
A detailed consideration of banking and its problems since 1930, with emphasis on monetary and banking policy and its relationship to business and fiscal policy. Spring semester. PREREQUISITE: Economics 3610.
- 4710. The Securities Market. (3).**
Problems of investment bankers, dealers, brokers. Functions of organized markets and over-the-counter markets. Mechanics of trading. Regulation of the market. Fall semester. PREREQUISITE: Management 3410.
- 4720. Public Finance. (3). (451)**
Theory and practice of government expenditure and revenue; theory, practice, shifting, and incidence of the various forms of taxation; elementary consideration of the integrating of revenue and expenditure into fiscal policy. Fall semester. PREREQUISITE: Economics 2120.
- 4910. Economic and Financial Problems. (1-3). (495)**
Approved research projects carried on by the student in his major area under supervision of members of the faculty. Both semesters. PREREQUISITES: senior standing and permission of the department chairman.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

- 5410. Advanced Economic Thought. (3).** (S-511)
 Advanced study of contemporary economic thought. Spring semester.
 PREREQUISITE: Economics 4410.
- 5420. Seminar in Economics. (3).** (S-513)
 Special study of selected current problems in this area; for the most part individual studies will be pursued, with group analysis and discussion at regular class meetings. Fall semester. PREREQUISITE: permission of the instructor.
- 5610. Monetary and Fiscal Policy. (3).** (S-561)
 The planning and implementation of various monetary and fiscal measures, with emphasis on the probable impact on important segments of the economy. Included is a survey of the tools, techniques, and changes in economic thinking as to their use. Fall semester.
 PREREQUISITE: Economics 4610.
- 5710. Investment Portfolio Planning. (3).** (S-562)
 A study of the objectives of investment management with the emphasis on investments by individuals rather than by institutions. A study of risks as the principal elements involved in making investment decisions; the analysis of particular industries, companies, and securities involved in the selection of portfolio securities. Spring semester. PREREQUISITE: Economics 4710.
- 5720. Seminar in Finance. (3).** (S-563)
 Special study of selected current problems in this area; for the most part individual studies will be pursued, with group analysis and discussion at regular class meetings. Spring semester. PREREQUISITE: permission of the instructor.

GRADUATE COURSES IN ECONOMICS AND FINANCE

(Most of the 4000 and 5000 courses described in the preceding section may be taken for graduate credit. For further details of the graduate program see the Bulletin of The Graduate School.)

EDUCATION

(See CURRICULUM AND INSTRUCTION)

EDUCATIONAL ADMINISTRATION AND SUPERVISION

PROFESSOR ELLERY EARL CRADER, *Chairman*
Room 401B, Education Building

PROFESSOR HAYNES

ASSISTANT PROFESSOR DANLEY

The Department of Educational Administration and Supervision does not offer a complete program at the undergraduate level; courses listed below are available to upper-division undergraduate students.

- 4110. Elementary School Administration. (3).** (486)
 A study of the major aims of the elementary school; planning the daily program through integration and related subjects; learning

to keep and interpret various types of records and reports; the importance of proper teacher-pupil, teacher-teacher, teacher-administrator, and teacher-parent relationships; special emphasis on the P-TA program in Tennessee.

4400. School and Community Relationships. (3). (411)

The relationship of the school to community agencies concerned with health and safety, government, religion, occupations, extension services, children's organizations, adult education, cultural activities, cooperative movements, etc.; relationship of the community to such school activities as attendance, athletics, lunch, libraries, extra-curricular programs, home study, records and reports, guidance, etc.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

5150. High School Administration. (3). (S584)

Modern practices in organizing and administering secondary schools; types of high schools; selection and assignment of staff; program of studies; records; management of buildings and grounds; pupil personnel; guidance; selection, retention, and improvement of teachers; and interpreting the school to the public.

GRADUATE COURSES IN EDUCATIONAL ADMINISTRATION AND SUPERVISION

6110. Elementary School Administration. (3).	(G-486)
6400. School and Community Relationships. (3).	(G-411)
7100. Public School Organization and Administration. (3).	(581)
7120. School Finance and Business Management. (3).	(582)
7140. School Housing and Transportation. (3).	(583)
7150. High School Administration. (3).	(584)
7160. Personnel Management in School Administration. (3).	(585)
7170. Internship in School Administration. (3 or 6).	(586)
7180. School Law. (3).	(588)
7200. City and County School Supervision. (3).	(571)
7210. High School Supervision. (3).	(572)
7220. Elementary School Supervision. (3).	(573)
7300. Techniques of Educational Research. (3).	(537)
7410. Human Relations in School Administration. (3).	(589)
7500. Contemporary Issues in Educational Leadership. (3).	(587)
7510. Seminar in Educational Leadership. (1 to 6).	(599)
7700. Special Problems: School and Community Relationships. (1 to 3).	(591D)
7710. Special Problems: School Supervision. (1 to 3).	(591E)
7720. Special Problems: School Plant and Transportation. (1 to 3).	(591F)
7730. Special Problems: School Finance and Business Management. (1 to 3).	(591G)
7750. Special Problems: School Law. (1 to 3).	(591H)
7995. Thesis. (3).	(593)
7996. Thesis. (6).	(596)

ENGLISH

PROFESSOR LAWRENCE WYNN, Acting Chairman
Room 342, Administration Building

PROFESSORS BANNON, CARSON, EVANS, FARRIOR, and WALTER SMITH

**ASSOCIATE PROFESSORS CHILDERS, HOWELL, OSBORNE, PHILLIPS,
 RILEY, ALFRED SMITH, and WOOLF**

**ASSISTANT PROFESSORS ABBETT, BOWMAN, COTHAM, DAMERON, HARE,
 MCLAURIN, MCLEMORE, MINETREE, and STAGG**

**MRS. ALLEN, MR. BLEVINS, MR. CAMPBELL, MR. CHAMBERS, MISS
 CHANEY, MISS CLIFTON, MR. COCHRAN, MR. COLLINS, MRS. COLLINS,
 MRS. DAVIS, MISS ENSLEY, MRS. FOX, MR. FURR, MR. GENTRY, MISS
 GIEM, MR. GRIMES, MR. HAGOOD, MRS. HAMPTON, MR. HEMBY, MISS
 HUFF, MISS JAMES, MISS JONES, MRS. KRAUSE, MRS. KUBIK, MISS
 MARTIN, MR. MAYFIELD, MR. MORGAN, MR. NAIL, MR. PAGE, MRS. REID,
 MR. ROBINSON, MR. WILLIAMS, and MR. YOUNG.**

Requirements for the major and minor in English are listed on page 112. All candidates for graduation at Memphis State University are required to complete English 1101, 1102, 2101, 2102, or their equivalent. These courses must be scheduled consecutively through the freshman and sophomore years, or until completed and may not be dropped from the student's course load except under very special conditions. They must be taken in sequence; no credit will be allowed on any course until all the preceding courses have been completed successfully.

- 1101. English Composition. (3). (111)**
 Training in the composition of English sentences, paragraphs, and expository essays related to elementary readings in the nature and history of the language and to exercises in formal logic.
- 1102. English Composition and Analysis. (3). (112)**
 Further training in the composition of expository essays related to study of types of literature. PREREQUISITE: English 1101 or equivalent.
- 2101. English Literature. (3). (211)**
 A survey of English literature from the beginning through the eighteenth century with attention to the development of forms and to the cultural context. PREREQUISITES: English 1101 and 1102 or the equivalent.
- 2102. English Literature. (3). (212)**
 A survey of English literature from the Romantic period to the present with continuing attention to the development of forms and to the cultural context. PREREQUISITES: English 1101, 1102, and 2101 or the equivalent.

NOTE: No student may enroll for an upper-division English course until he has completed satisfactorily English 1101, 1102, 2101, 2102, or the equivalent.

3211. The Medieval Period. (3).

Readings in English authors chiefly of the fourteenth and fifteenth centuries related to study of Middle English.

3212. The Renaissance. (3).

(350)

A study of the poetry and prose, chiefly non-dramatic, of the sixteenth and the early seventeenth century.

3213. The Seventeenth Century. (3).

(340)

Poetry and prose from Donne and Bacon through Milton studied in relation to political and intellectual events of the period.

3214. The Eighteenth Century. (3).

(341)

Poetry and prose from Dryden through Blake; detailed study of representative works and attention to theoretical aspects of neoclassicism and the advent of romanticism.

3221. The Romantic Period. (3).

(342)

The poetry of Wordsworth, Coleridge, Shelley, Keats, and Byron, with collateral readings in the prose of the period.

3222. Victorian Poetry. (3).

(351)

A study of major English poets writing between 1830 and 1900 with some consideration of the social, intellectual, and aesthetic interests of the period.

3223. Victorian Prose. (3).

(352)

A study of English prose between 1830 and 1900 with emphasis on critical and philosophical works.

3224. The Twentieth Century. (3).

A study of the major literary movements and techniques of English and American literature in the twentieth century.

3321. American Literature. (3).

(301)

A survey of American literature from the beginning through the Romantic period.

3322. American Literature. (3).

(302)

A survey of American literature from the advent of Realism to the present.

3341. The American Novel. (3).

(311)

Reading of representative American novels of the nineteenth century with consideration of their relation to English and European work and to American developments in the genre.

3342. The American Novel. (3).

(312)

Reading of representative American novels from 1900 to the present, with attention to relevant literary and cultural developments in Europe and America.

3411. World Literature. (3).

(361)

A survey of European literature in English translation from Homer through the Renaissance.

3412. World Literature. (3).

(362)

A survey of European literature in English translation from about 1600 to the present.

3441. The Continental Novel. (3).

(313)

Critical analysis and appreciation of representative novels chosen from the works of important European writers from 1850 to 1950.

- 3501. English Grammar. (3). (442)**
 A brief introduction to linguistic scholarship followed by a survey of current grammatical theory, a review of English grammatical terminology, and a consideration of the relation between grammar and style.
- 3701. Theory and Practice in Literary Criticism. (3). (400)**
 An introduction to theory of literature related to exercises in practical criticism.
- 4231. Chaucer. (3). (421)**
 A study of Chaucer as a literary artist, including a reading of representative works and discussion of their philosophical and social context.
- 4232. Shakespeare's Tragedies. (3). (432)**
 Reading of all Shakespeare's tragedies, detailed critical examination of at least five of them, and consideration of the principles governing tragedy.
- 4233. Shakespeare's Comedies and Histories. (3). (433)**
 A study of the best known comedies and histories.
- 4234. Milton. (3). (422)**
 A study of Milton's development as a literary artist, with emphasis on his poetry but with some attention to his prose.
- 4235. Tennyson and Browning. (3). (423)**
 A study of poems of different types by each poet with attention to his philosophy and religion and his relation to forerunners and successors.
- 4241. The English Novel. (3). (451)**
 Reading of major English novels from the Renaissance to the mid-nineteenth century related to study of the origin and development of the genre.
- 4242. The English Novel. (3). (452)**
 A study of major English novels from the mid-nineteenth century to the present with attention to developments in the genre.
- 4251. English Drama. (3). (411)**
 A study of the development of the genre in England from medieval times to 1642.
- 4252. English Drama. (3). (412)**
 A study of English drama from 1660 to the present, with attention to developments in the genre.
- 4321. American Literature: Nationalism and Romanticism. (3).**
 A study of selected American writers from the national and romantic periods with background readings in philosophical, political, and critical sources.
- 4322. American Literature: Realism and Naturalism. (3).**
 A study of selected American writers from the periods of realism and naturalism with background readings in philosophical, political, and critical sources.
- 4323. Southern Literature. (3). (470)**
 A study of Southern literature from its beginning to the present with emphasis on twentieth-century authors.

- 4351. American Drama.** (3). (413)
 The development of American drama as a literary form studied in relation to the English and European tradition and to currents in American thought.
- 4400. British and Continental Backgrounds of English Literature.** (3). (490)
- 4441. The Short Story.** (3). (331)
 Reading of European, English, and American short stories of the nineteenth and twentieth centuries related to study of the origins and development of the genre.
- 4461. Biblical Literature.** (3). (380)
 A study of selected books from the Old and New Testaments with emphasis on their literary value and with consideration of the place of the Bible in world literature.
- 4501. History of the English Language.** (3). (441)
 A study of the historical development of English with attention to changes in sound, vocabulary, syntax, and meaning.
- 4601. Creative Writing.** (3). (372)
 Discussion of technique of fiction and verse, analysis of models, and criticism of student work. PREREQUISITE: permission of instructor.
- 4602. Expository Writing.** (3).
 Advanced training in the composition of expository prose.

GRADUATE COURSES IN ENGLISH

For course descriptions and further details of the graduate program, see the Bulletin of The Graduate School.

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|---|--------|
| 6231. Chaucer. (3). | (G421) |
| 6234. Milton. (3). | (G422) |
| 6241. The English Novel. (3). | (G451) |
| 6242. The English Novel. (3). | (G452) |
| 6251. English Drama. (3). | (G411) |
| 6252. English Drama. (3). | (G412) |
| 6351. American Drama. (3). | (G413) |
| 6501. History of the English Language. (3). | (G441) |
| 7211. Studies in Medieval Literature. (3). | |
| 7212. Studies in Renaissance Literature. (3). | |
| 7213. Studies in Seventeenth-Century Literature. (3). | |
| 7214. Studies in Restoration and Eighteenth-Century Literature. (3). | (543) |
| 7221. Studies in the Literature of the Romantic Period. (3). | (571) |
| 7222. Studies in Victorian Literature. (3). | (572) |
| 7223. Studies in Contemporary Literature. (3). | |
| 7231. Studies in Shakespeare. (3). | |
| 7321. Studies in American Literature before 1860. (3). | (561) |
| 7322. Studies in American Literature since 1860. (3). | (562) |
| 7501. Studies in English Vocabulary. (3). | (501) |
| 7701. Literary Criticism. (3). | |
| 7801. Bibliography and Methods of Research. (3). | (500) |
| 7995. Thesis. (3). | (593) |
| 7996. Thesis. (6). | (596) |

FINANCE

(See ECONOMICS AND FINANCE)

FRENCH

(See MODERN LANGUAGES)

GEOGRAPHY AND GEOLOGY

PROFESSOR PAUL HARDEMAN SISCO, *Chairman*
Room 109, Johnson Hall

PROFESSORS CARIANI and MATTHEWS

ASSOCIATE PROFESSOR SOBOL

ASSISTANT PROFESSORS BUTLER, CORBET, and FRYE

MR. AIKEN, MRS. ALMY, MR. BARBER, and MR. SINIARD

Requirements for the major and minor in Geography are listed on page 113.

GEOGRAPHY

- 1101. Introduction to Earth Science I.** (4). (111)
 An introductory study of earth-sun and earth-moon relations, the oceans and their movements, weather, and climate.
Three lecture, two laboratory hours per week.
- 1102. Introduction to Earth Science II.** (4). (112)
 An introductory study of maps as a basic tool in understanding earth phenomena, landforms, the structure and composition of rocks, soils, and their capabilities.
Three lecture, two laboratory hours per week.
- 1201. Economic Geography: Major Basic Resources.** (3). (121)
 Man's development and use of such major basic resources as land, water, forests, and minerals.
- 1211. Economic Geography: Industrial and Commercial.** (3). (122)
 An introductory study of manufacturing, trade, and transportation.
- 2301. A Survey of World Regions I.** (3). (235)
 Regional geography of Europe, the Soviet Union, and the Middle East with emphasis on the people and their activities as related to the environment.
- 2311. A Survey of World Regions II.** (3). (236)
 Regional geography of the Orient, the Pacific world, Africa, Latin America, and Anglo-America, with emphasis on the people and their activities as related to the environment.
- 3302. Africa.** (3). (335)
 A survey of a low latitude continent with high contrasts in cultural and physical phenomena.
- 3312. Anglo-America I.** (3). (331)
 An analytical study of the cultural-physical complex in the area of the United States east of the Rockies.

- 3313. Anglo-America II.** (3). (332)
An analytical study of the cultural-physical complex in the western United States, Canada, and Alaska.
- 3314 Middle America.** (3). (333)
A study of the regions and resources of Mexico, Central America, and the West Indies as they relate to present and potential economic development.
- 3315. South America.** (3). (334)
An analysis of the regional economies, resources, and trade in the continent, with stress upon the changing significance of the landscape as related to national and international problems.
- 3401. Historical Geography of Europe.** (3). (321)
An analysis of human occupancy in Europe during selected periods, with a study of significant relationships between the physical and cultural features.
- 3402. Historical Geography of the United States.** (3). (322)
A study of the geography of selected areas of the United States for sequent periods of their occupancy by the white man.
- 3411. Principles of Conservation.** (3). (351)
Current problems and responsibilities relating to the conservation of soil, minerals, forests, water, wild life, and the natural beauty of the earth.
- 3501. Cartography.** (3). (341)
An introductory course in (1) map projections, grids, scales, symbols, and (2) map drafting for geographical uses. Lectures and laboratory work.
- 3502. Map Intelligence.** (3). (342)
An intensive investigation of charts, graphs, maps, and aerial photography as geographical tools. Lectures and laboratory work in the Johnson Hall Map Library, a depository of the United States Army Map Service for all maps and material it provides.
- 3511. Photogrammetry.** (3). (343)
A survey course dealing with the art and science of obtaining geographic information from landscape surveys by means of photography.
- *4111. Earth Science I. The Atmosphere.** (3). (412)
An analytical study of the physical processes underlying the behavior and responses of the atmosphere and the application of this general body of knowledge to an understanding of the relationship of man to this important element of his environment.
- *4121. Earth Science II. The Earth.** (3). (411)
An analytical study of land forms, their changes, and their uses to man.
- *4122. Earth Science III. The Soil.** (3). (413)
An analytical study of soils to include their physical, chemical, and biological qualities, and their classes, uses, and measures of conservation.

*Geography 4111, 4121, 4122, and 4131 are designed to be of interest and value to students in the physical sciences as well as those in the social sciences; assignments include lectures, laboratory work, and field trips.

- 4131. Earth Science IV. The Oceans.** (3). (414)
 An analytical study of the oceans to include their physical, chemical, and biological qualities; their movements, resources, climatic influences, and importance for transportation.
- 4304. Western Europe.** (3). (431)
 A geographic analysis of the lands west of the Iron Curtain.
- 4305. The Soviet Realm.** (3). (432)
 A regional analysis of the Soviet Union and its satellites.
- 4306. Asia South of the Soviet Realm.** (3) (433)
 A consideration of the significance of regional differences in Japan, China, and India, and a brief survey of the remaining areas.
- 4316. The South.** (3). (436)
 A specialized study of selected regions in the South with emphasis on changes and trends in the cultural-physical complex.
- 4317. Tennessee.** (3). (437)
 A comparison of the human-use, political, and physical regions of the state.
- 4421. Geopolitics.** (3). (422)
 An analysis of the world's political regions, with primary emphasis placed on the varied factors affecting the political importance of the principal powers and power blocs. Individual student study into selected problems is an integral part of this course.
- 4431. Urban Land Uses.** (3). (461)
 A study of the allocation of land for urban uses; the adjustments and adaptations to existing physical phenomena; the patterns, functions, and forms of specific urban land areas; and some of the continuous problems of urban development and growth.
- 4432. City Planning.** (3). (462)
 The fundamental principles of urban planning, basic elements of a city plan, and the necessity of continuity in planning administration.
- 4433. Urban Renewal.** (3). (463)
 Changing urban land uses, first in areas which must improve or rebuild obsolete patterns, functions, and forms; and second in areas with acceptable uses, structures, and institutions which in the interest and welfare of all the people must have additional space for growth and expansion.
- 4611. Regional Field Study.** (6). (441-B)
 A comparative study of selected regions of the world, including library study of the regions to be traversed, a minimum of sixteen days of study in the regions, and oral and written reports. PRE-REQUISITE: permission of the instructor.

(The following is a graduate course for which undergraduates within 36 semester hours of graduation may enroll.)

- 5422. Political Geography.** (3) (S525)
 The content and philosophy of political geography as illustrated by a broad survey of major writers in the field followed by student analysis of individual nation-states.

GEOLOGY

- 1101. Physical Geology.** (4).
 A study of the earth's internal composition and structure, the forces which establish the gross form of the earth's land masses and ocean

basins, and the geologic processes of denudation which account for the diverse and complex detail of the earth's surface configuration.

Three lecture, three laboratory hours per week.

1201. Historical Geology. (4).

The earth's origin and geologic history as interpreted from the stratigraphic and paleontological records, emphasizing the succession of geologic and biogenetic events which have led to the present-day distribution of land and water, configuration of coastlines, topography of land surfaces and ocean basins, and form and distribution of life.

Two lecture, two laboratory hours per week.

GRADUATE COURSES IN GEOGRAPHY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

6111. Earth Science I. The Atmosphere. (3).	(G-412)
6121. Earth Science II. The Earth. (3).	(G-411)
6122. Earth Science III. The Soil. (3).	(G-413)
6131. Earth Science IV. The Oceans. (3).	(G-414)
6304. Western Europe. (3).	(G-431)
6305. The Soviet Realm. (3).	(G-432)
6306. Asia South of the Soviet Realm. (3).	(G-433)
6316. The South. (3).	(G-436)
6317. Tennessee. (3).	(G-437)
6431. Urban Land Uses. (3).	(G-461)
6432. City Planning. (3).	(G-462)
6433. Urban Renewal. (3).	(G-463)
6611. Regional Field Study. (3).	(G-441B)
7123. Physiography of the Eastern United States. (3).	
7124. Physiography of the Western United States. (3).	
7202. Economic Geography: Agricultural. (3).	(521)
7212. Economic Geography: Industrial and Commercial. (3).	(522)
7412. Conservation of Natural Resources. (3).	(551)
7422. Political Geography. (3).	(525)
7434. Transportational Lands. (3).	(565)
7435. Commercial Lands. (3).	(566)
7441. Population Geography. (3).	(524)
7451. Geographic Tools and Techniques. (3).	(571)
7461. Development of Geographic Thought. (3).	(590)
7503. Maps, Charts, and Graphs. (3).	(541)
7601. Seminar in Regional Geography. (3).	(531)
7602. Seminar in Climatology. (3).	
7621. Problems in Regional Geography. (3).	(591A)
7995. Thesis. (3).	(593)
7996. Thesis. (6).	(596)

GERMAN

(See MODERN LANGUAGES)

GREEK

(See CLASSICAL LANGUAGES)

HEALTH AND PHYSICAL EDUCATION

PROFESSOR RALPH L. HATLEY, *Chairman*
Room 215, Field House

PROFESSOR LAMBERT

ASSOCIATE PROFESSORS DAVIS, ROANE, and SCOTT

ASSISTANT PROFESSORS DOWD, EHLERS, FLOYD, FRENCH, GARRETT,
 ILLING, JOHNSON, MORRIS and PRICE

MISS ANTONELLI, MR. BROWN, MR. BRYSON, MR. COBB, MISS DURDEN,
 MR. DAVIS, MR. HOGGATT, MR. HUMPHREYS, MR. MURPHY,
 MRS. OWEN, MR. PATRICK, MR. SMITH, MISS THORPE,
 MR. STEPHENSON, and MR. WAITES

Majors and minors are offered in (1) health and (2) health and physical education. Requirements are listed on page 138.

For details of the program in corrective therapy offered in cooperation with Kennedy Veterans Hospital, see the department chairman.

HEALTH

- 1102. Health, Personal and Community. (3). (101)**
 The physiological basis of correct living, including fundamental biological facts; the psychological aspects of human behavior as they affect the individual health conduct and mental hygiene; the agents of disease and modern scientific methods of controlling them; the roles of public health agencies and related cooperative agencies; the individual's responsibility for maintaining a healthful community.
- 1202. Introduction to Public Health. (3). (150)**
 The organization and structure of official and voluntary health agencies, international, national, state, and local, with a consideration of their aims, objectives, and principles as they are related to the nurse and teacher. .
- 1302. Control Methods of Preventable Diseases. (3). (151)**
 The factors which relate to the control of communicable and non-communicable disease; modern techniques of prevention, immunization against, and control of disease through medical and nursing supervision.
- 2102. Safety and First Aid. (3). (231)**
 This course is designed to assist students in developing an understanding of the basic principles of accident prevention as applicable to the home, school and community, and techniques of administering immediate and temporary care in the event of an injury or sudden illness.
- 2202. Nutrition. (3). (Same as Home Economics 2202.) (241)**
- 2302. Maternal and Child Health. (3). (250)**
 A study of the development of community programs for adequate maternal and child care, with emphasis on the improvement of social, economic, and physical welfare of mothers and children through co-operation of all community agencies; materials, techniques, and resources used in solving maternal and child health problems.

- 3102. Health Education in Schools. (3).** (301)
An analysis of the health problems of school-age children in the home, school, and community, with emphasis on improving health behavior through sound health teaching; procedures and principles involved in coordinating health instruction with other areas of the curriculum; materials and resources for health teaching.
- 3202. Health Service in Schools. (3).** (302)
Methods of organizing and implementing health measures in schools and of relating them to other community agencies; techniques for determining health status through screening processes; the detection of remedial defects and follow-up for correction; the promotion of health through environment and special health services; sanitation in the home, school and community as it affects the school child.
- 3306. Elementary School Health Education. (3).** (303)
The school health program involving health services, healthful school living, and health instruction is considered. Content and materials suitable for an elementary school health course are stressed.
- 3402. Safety Education. (2).** (321)
An orientation in the various methods, techniques and teaching devices in safety education and first aid courses with special emphasis placed on the home and leisure activities. Successful completion of this course qualifies one for the Red Cross first aid instruction certificate. PREREQUISITES: Health 2102 or ARC Advanced certificate.
- 3502. Prevention and Care of Athletic Injuries. (3).** (345)
Practical and theoretical aspects of treatment of athletic injuries in an athletic training program; supplies, training table, therapeutic equipment, and techniques in conditioning and bandaging.
- 4102. Problems of the Exceptional Child.**
(Same as Psychology 4401). (3). (414)
- 4202. Education of Exceptional Children.**
(Same as Special Education 4151). (3). (415)
- 4302. Observation in Community Agencies. (3).** (416)
An introduction to the purposes, objectives, functions, and programs of a variety of community health and welfare agencies, with opportunities to visit official and volunteer agencies. Application should be made at least 60 days before the student plans to enroll in the course. PREREQUISITE: permission of the chairman of the Department of Health and Physical Education.
- 4402. Field Practice in Community Agencies. (3).** (417)
Observation and supervised practice of all phases of public health activities in which the student would be expected to participate in professional life; the course is organized to meet the needs of the individual student. Application must be made at least 60 days before the student plans to enroll in the course. PREREQUISITE: permission of the chairman of the Department of Health and Physical Education.
- *4502. Problems in Health Education. (1 to 3).** (*434)
Designed to afford opportunities for prospective or in-service school and other professional personnel to work individually or in groups

*Credit may be earned in only one of the following courses: Health 4502, Physical Education 4303.

on health education factors in the solution of practical problems.
PREREQUISITE: permission of the instructor.

- 4602. Supervision and Administration in Health Agencies. (3).** (450)
 The functions, principles, and procedures of supervision and administration of health agencies, with emphasis on the relationship and responsibilities of personnel in planning, promoting, improving, and evaluating the total health activities in the family-centered health services; legal and legislative aspects of health activities.
- 4702. Trends and Problems in Public Health. (3).** (470)
 A review of the historical development and current trends in professional nursing as a community service; the various needs and demands for medical care; the contribution of the professional personnel in providing for total health services and education.
- 4802. Mental Hygiene. (Same as Education 4131). (3).** (476)
- 4902. Health Statistics. (3).** (480)
 A study of the statistical method, including collection, analysis, and presentation of numerical data pertaining to health problems.

GRADUATE COURSES IN HEALTH

(Numbers prefixed with "G" identify courses described in the preceding section for which graduate credit may be given. For details of the graduate program, see the Bulletin of The Graduate School.)

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| 6302. Observation in Community Agencies. (3). | (416) |
| 6402. Field Practice in Community Agencies. (3). | (417) |
| 6602. Supervision and Administration in Health Agencies. (3). | (450) |
| 6702. Trends and Problems in Public Health. (3). | (470) |
| 6902. Health Statistics. (3). | (480) |
| 7112. Environmental and Occupational Health Education. (3). | (554) |
| 7152. Health Problems. (1-3). | (591) |
| 7702. Health Education in Organic and Functional Diseases. (3). | (551) |
| 7802. Community Health Education. (3). | (552) |
| 7902. Health Guidance and Counseling. (3). | (553) |

PHYSICAL EDUCATION

(For details of the physical education requirements for graduation, see page 87.)

- 1001. Orientation to Physical Activity. (1).** (100)
 Orientation to physical activity (for men); orientation and fundamental rhythms (for women). One semester required of all students (except majors and minors in health and physical education). (Transfer students with at least one semester hour of physical education credit from the previous school need not take Physical Education 1001 as a prerequisite for physical education courses).
- 1101. Orientation for Physical Education Majors and Minors. (1).** (111)
 Fundamental movements, touch football, basketball, volleyball, softball, and speedball (for men); volleyball, soccer, speedball, and tumbling (for women). This course is required of and restricted to students majoring or minoring in physical education.

1---- Selected Physical Activities. (1).

Two or three semesters required of all students, the specific course number to be selected from the following list. PREREQUISITE: Physical Education 1001.

1111. Beginning Swimming (men and women) (219 & 258)	1321. Tennis and Golf (men and women) (246)
1121. Intermediate Swimming (men and women) (259)	1331. Outdoor Education Activities (men and women) (270)
1131. Survival Swimming (men and women) (260)	1401. Bowling (men and women) (214)
1141. Swimming-Lifesaving (men and women) (261)	1501. Tennis (men and women) (215 & 256)
1151. Synchronized Swimming (men and women) (266)	1601. Golf (men and women) (216 & 257)
1161. Handball (men and women) (220)	1701. Volleyball and Softball (men) (217)
1171. Beginning Gymnastics (men and women) (221 & 264)	1801. Badminton (men and women) (218 & 255)
1181. Combatives (men) (212)	1901. Advanced Badminton (men and women) (265)
1191. Fencing (men and women) (262)	<i>NOTE: The following courses are required of all students majoring in health and physical education.</i>
1201. Adapted Physical Education (men and woman) (211 & 251)	1101. (See description above) (111)
1211. Soccer, Speedball, and Volleyball (women) (252)	1121. Beginning Swimming (men and women) (259)
1221. Basketball, Field Hockey, Softball (women) (253)	1131. Survival Swimming (men and women) (260)
1231. Equitation (men and women) (263)	1141. Swimming (life saving— men and women) (261)
1241. Rhythms for Elementary School (men and women) (240)	1171. Beginning Gymnastics (men and women) (221 & 264)
1251. Folk and Square Dance (men and women) (241)	1221. Basketball, fieldball, softball, track and field events (women) (253)
1261. Tap Dance (men and women) (242)	1251. Folk and social dance (men and women) (241)
1271. Modern Dance (men and women) (243)	1271. Modern dance (women) (243)
1281. Modern Dance (advanced— men and women) (244)	1291. Archery and recreation games (men and women) (245)
1291. Archery and Bowling (women) (245)	1321. Tennis and golf (men and women) (246)
1301. Weightlifting (men) (213)	
1311. Archery and Recreational games (men and women) (245)	

2103. Fundamentals and Techniques of Football. (2). (281)

Fundamentals of football coaching with special emphasis on blocking, tackling, passing, punting, catching; principles of line and backfield work; playing the various positions; formation of plays, generalship, signal systems, and scouting; coaching problems; study of the rules.

2203. Fundamentals and Techniques of Basketball. (2). (282)

The theory and practice of basketball coaching, history of the game, and study of the rules; offensive and defensive systems; drills for the development of fundamental skills; training and conditioning of basketball squads.

2303. Fundamentals and Techniques of Track and Field. (2). (283)

The accepted forms of starting, hurdling, distance running, pole vaulting, discus and javelin throwing, and sprinting; physical conditions affecting speed, endurance, and fatigue; and selection and preparation of contestants for track and field events; managing and officiating games and meets; study of rules.

**2403. Fundamentals and Techniques of Baseball
and Softball. (2). (284)**

The theory and practice of baseball coaching, with attention given to the coaching of the individual in base running, fielding, batting, and pitching; detailed study of each position; offensive and defensive team play; officiating; scoring; study of rules.

2503. History and Principles of Physical Education. (2). (299)

A study of physical education systems and practices from the beginnings to the present time, designed to show the place of a sound

physical education program in the modern school system; underlying principles common to all epochs; changes related to political and economic cycles.

- 3103. Materials and Methods in Team Sports for Women. (3). (327)**
Fundamentals of teaching and coaching team sports, including history, rules, skills, and teaching progressions; laboratory experience in intramural and activity classes. PREREQUISITES: Physical Education 1101 and 1221.

Two lecture, two laboratory hours per week.

- 3203. Techniques of Individual Sports. (3). (328)**
Study of teaching methods, instruction and participation in individual recreational sports, tumbling, mass gymnastics, and conditioning activities; means of providing facilities for these activities. PREREQUISITES: Physical Education 1291 and 1321.

Two lecture, two laboratory hours per week.

- 3303. Adapted Physical Education. (2). (342)**
A theory course including lectures, demonstrations, and problems of the mechanics of physical dormitories and their causes; abnormalities of the spine, feet, and other postural and functional conditions; and methods of class organization.

Two lecture hours per week, plus laboratory periods to be arranged.

- 3403. Kinesiology. (3). (343)**
Analysis of bodily movements in terms of the muscular forces operating on the bones. PREREQUISITES: Biology 1631 and 1632.

- 3503. Rhythms and Dance. (3). (351)**
Basic theory, participation, techniques, materials, and teaching methods in rhythmic activities from grades 7 through 12. PREREQUISITE: Physical Education 1251.

Laboratory periods to be arranged.

- 3603. Methods and Supervision of Physical Education in the Elementary Schools. (2). (371)**
Theory of and activities for physical education in grades 1 through 9, including teaching methods, program planning, and participation in stunts, mass gymnastics, relays, informal games, team games, individual and dual sports, and mimetics; practical experience is gained through observing and directing play activities for children in the University Campus School.

Laboratory periods to be arranged.

- 3705. Outdoor Education and Camp Leadership. (3). (372)**
The philosophy, modern trends, administration, program content and methods of leadership in camping and outdoor education activities. Field trips and outdoor camping experiences.

- 3806. Physical Education for the Elementary School. (3). (361)**
Materials and methods for physical education in grades 1 through 6, including philosophy, program planning, and practical experience gained through observing and directing play activities for children in the University Campus School. Laboratory periods to be arranged. PREREQUISITE: P. E. 1241.

- 4105. Recreational Leadership. (3). (426)**
Development of skills and techniques necessary for successful leadership in city, county, and school recreation programs.

- 4204. Tests and Measurements in Health and Physical Education.** (3). (432)
 A study of the various tests in the field of health and physical education, including uses and interpretation of elementary statistical techniques.
- *4303. Problems in Physical Education.** (1 to 3). (*434)
 Designed to afford opportunity for prospective or in-service school and other professional personnel to work individually or in groups on physical education factors in the solution of practical problems.
 PREREQUISITE: permission of the instructor.
- 4403. Clinical Practice.** (6). (444)
 Supervised clinical practice in the Department of Physical Medicine and Rehabilitation Service at the Kennedy Veterans Hospital; instruction will be given in the conditioning, ambulation, and self-care of patients with neurological, pulmonary, geriatric, neuropsychiatric, speech, spinal cord, cardiac, and other types of disabilities.
- 4503. Organization and Administration of Health and Physical Education.** (3). (482)
 A study of administrative problems of health and physical education, including curriculum, facilities, buying and caring for equipment, general class organization, and organization of an intramural program.

GRADUATE COURSES IN PHYSICAL EDUCATION

(Numbers beginning with '6' identify courses described in the preceding section for which graduate credit may be given. For details of the graduate program, see the Bulletin of The Graduate School.)

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| 6105. Recreational Leadership. (3). | (G-426) |
| 6403. Clinical Practice. (6). | (G-444) |
| 6503. Organization and Administration of Health and Physical Education. (3). | (G-482) |
| 7103. Foundations of Physical Education. (3). | (501) |
| 7124. Curriculum Construction in Health Education and Physical Education. (3). | (562) |
| 7134. Supervision of Health and Physical Education. (3). | (570) |
| 7144. Development and Supervision of an Elementary School Health and Physical Education Program. (3). | |
| 7153. Physical Education Problems. (1 to 3). | |
| 7204. Introduction to Research in Health and Physical Education. (3). | (502) |
| 7305. Foundations of a Philosophy for American Recreation. (3). | (503) |
| 7404. Measurement and Evaluation in Health and Physical Education. (3). | (510) |
| 7505. Organization and Administration of Group Recreation. (3). | (526) |
| 7603. The Administration of Athletics. (3). | (533) |

HEBREW

(See MODERN LANGUAGES)

*Credit may be earned in only one of the following courses: Physical Education 4303, Health 4502.

HISTORY

PROFESSOR AARON M. BOOM, *Chairman*
Room 154, Administration Building

PROFESSOR MITCHELL

ASSOCIATE PROFESSORS GILLASPIE, ORR, and WHITE

ASSISTANT PROFESSORS CRAWFORD, CROUSE, KRIEGEL, LEON, MITCHELL,
 PIERCE, SCOTT, STANDARD, STOKES, TROTTER, and WILSON

MR. COBB, MR. ISAACS, MISS PROVINE, and MRS. WOODBURY

Requirements for the major and minor in history are listed on page 113. All candidates for graduation at Memphis State University are required to complete History 2601 and 2602; these courses are not open to students with fewer than 25 semester hours credit.

- 1301. The Development of European Civilization I.** (3). (111)
 Especially recommended for freshmen, this course traces the forms of western civilization from their ancient beginnings through the seventeenth century.
- 1302. The Development of European Civilization II.** (3). (112)
 Especially recommended for freshmen, this course traces the forms of western civilization from the beginning of the eighteenth century to the present.
- 2601. The United States to 1865.** (3). (221)
 A survey of the United States from the discovery to the close of the Civil War. PREREQUISITE: sophomore standing.
- 2602. The United States since 1865.** (3). (222)
 A survey of the United States from the Civil War to the present. PREREQUISITE: sophomore standing.
- 3121. History of England before 1660.** (3). (301)
 A survey of the development and growth of England into a nation, with attention given to constitutional progress and the achievements of the Tudor and Stuart periods. PREREQUISITE: junior standing.
- 3122. History of England since 1660.** (3). (302)
 A survey of the development of England's democratic government, considering economic, social, intellectual, diplomatic, and imperial affairs. PREREQUISITE: junior standing.
- 3200. History of Spain.** (3). (371)
 A study of Spanish institutions, culture, and politics. PREREQUISITE: junior standing.
- 3211. Latin America from Discovery to 1825.** (3). (315)
 A survey of the institutions and politics of Latin America from discovery to 1825. PREREQUISITE: sophomore standing.
- 3212. Latin America from 1825 to the Present.** (3). (316)
 A survey of the institutions and politics of Latin America since 1825. PREREQUISITE: sophomore standing.
- 3230. History of Inter-American Relations
 from 1808 to the Present.** (3). (372)
 A study of the principal developments in Latin American countries since 1808. PREREQUISITE: junior standing.

3321. **History of Ancient Civilization I.** (3). (311)
A study of the Ancient Near East and Greece through the time of Alexander the Great. PREREQUISITE: History 1301.
3322. **History of Ancient Civilization II.** (3). (312)
A study of the Hellenistic World and of the rise and fall of the Roman Empire. PREREQUISITE: History 1301.
3801. **American Diplomatic History to 1889.** (3). (331)
A study of American diplomacy to 1889. PREREQUISITE: junior standing and History 2601 and 2602.
3802. **American Diplomatic History since 1889.** (3). (332)
A study of American diplomacy since 1889. PREREQUISITE: junior standing and History 2601 and 2602.
3821. **Economic History of the United States to 1865.** (3). (341)
A study of American economic development to 1865. PREREQUISITE: junior standing and History 2601.
3822. **Economic History of the United States since 1865.** (3). (342)
A study of American economic development since 1865. PREREQUISITE: junior standing and History 2602.
3841. **Constitutional History of the United States to 1865.** (3). (343)
A study of the formative period and the early period of operations of the United States Constitution. PREREQUISITE: junior standing and History 2601.
3842. **Constitutional History of the United States since 1865.** (3). (344)
A study of the operation of the United States Constitution since 1865. PREREQUISITE: junior standing and History 2602.
3861. **Social and Intellectual History of the United States to 1865.** (3). (361)
A study of the main social and intellectual trends in the United States up to 1865. PREREQUISITE: junior standing and History 2601.
3862. **Social and Intellectual History of the United States since 1865.** (3). (362)
A study of the main social and intellectual trends in the United States since 1865. PREREQUISITE: junior standing and History 2602.
3900. **History of Tennessee.** (3). (351)
A study of the political, economic, and social development from 1769 to 1861. PREREQUISITE: junior standing and History 2601.
3920. **The Old South.** (3). (352)
A study of southern institutions prior to the outbreak of the Civil War. PREREQUISITE: junior standing and History 2601.
3930. **The New South.** (3). (353)
A study of the South from the Civil War to the present. PREREQUISITE: junior standing and History 2602.
3940. **The West.** (3). (354)
A study of the significance of the frontier in the development of the United States from the Revolutionary period to 1890. PREREQUISITE: junior standing and History 2601 and 2602.

- 4160. History of Russia.** (3). (402)
A survey of Russian history from early times to the present. PREREQUISITE: junior standing.
- 4240. History of Mexico.** (3). (471)
A survey of Mexico, from independence to the present. PREREQUISITE: junior standing and History 3211.
- 4250. History of Brazil.** (3). (472)
A survey of Brazil, from independence to the present. PREREQUISITE: junior standing and History 3211.
- 4370. The Medieval World.** (3). (451)
A study of the history of institutional forms beginning with the decline of the Roman Empire and ending with the beginnings of Renaissance life. PREREQUISITE: junior standing and History 1301 and 1302.
- 4380. The Renaissance World.** (3). (452)
A study of the achievements and forces, political and economic, social and cultural, creative and intellectual, which made up this fascinating foundation of modern European civilization. PREREQUISITE: junior standing and History 1301 and 1302.
- 4440. The Era of the French Revolution.** (3). (411)
A study of the Enlightenment, the French Revolution, and the Napoleonic era. PREREQUISITE: junior standing.
- 4450. Europe in the Nineteenth Century.** (3). (412)
A study of Europe during the period 1815-1914. PREREQUISITE: junior standing.
- 4460. Europe in the Twentieth Century.** (3). (413)
A study of Europe since the outbreak of World War I. PREREQUISITE: junior standing.
- 4501. Intellectual and Social History of Europe I.** (3). (481)
Especially designed to appeal to history majors, this course considers intellectual history from the twelfth-century Renaissance through the period of the Thirty Years' War. PREREQUISITE: senior standing and History 1301 and 1302.
- 4502. Intellectual and Social History of Europe II.** (3). (482)
Especially designed to appeal to history majors, this course considers intellectual history in the Enlightenment, the Romantic Era, and the Liberal Tradition. PREREQUISITE: senior standing and History 1301 and 1302.
- 4620. Colonial America, 1607-1763.** (3). (421)
A study of English America before 1763, with considerable attention given to Spanish, French, and Dutch colonization. PREREQUISITE: junior standing and History 2601.
- 4630. Revolutionary Era, 1763-1790.** (3). (422)
A study of the forces that brought on the American Revolution, the Revolution, and the founding of the Federal Union. PREREQUISITE: junior standing and History 2601.
- 4640. Early National Period, 1790-1850.** (3). (423)
A study of American history from unification until the beginnings of division. PREREQUISITE: junior standing and History 2601.
- 4660. Civil War, 1850-1865.** (3). (424)
A study of division and conflict. PREREQUISITE: junior standing and History 2601.

- 4680. Emergence of Modern America, 1865-1914.** (3). (425)
 A study of the United States from the end of the Civil War to the outbreak of World War I. PREREQUISITE: junior standing and History 2601 and 2602.
- 4700. Recent American History, 1914-present.** (3). (426)
 A study of the United States from World War I to the present. PREREQUISITE: junior standing and History 2601 and 2602.

GRADUATE COURSES IN HISTORY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

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| 6160. History of Russia. (3). | (G-402) |
| 6240. History of Mexico. (3). | (G-471) |
| 6250. History of Brazil. (3). | (G-472) |
| 6370. The Medieval World. (3). | (G-451) |
| 6380. The Renaissance World. (3). | (G-452) |
| 6440. The Era of the French Revolution. (3). | (G-411) |
| 6450. Europe in the Nineteenth Century. (3). | (G-412) |
| 6460. Europe in the Twentieth Century. (3). | (G-413) |
| 6501. Intellectual and Social History of Europe I. (3). | (G-481) |
| 6502. Intellectual and Social History of Europe II. (3). | (G-482) |
| 6620. Colonial America, 1607-1763. (3). | (G-421) |
| 6630. Revolutionary Era, 1763-1790. (3). | (G-422) |
| 6640. Early National Period, 1790-1850. (3). | (G-423) |
| 6660. Civil War, 1850-1865. (3). | (G-424) |
| 6680. Emergence of Modern America, 1865-1914. (3). | (G-425) |
| 6700. Recent American History, 1914-present. (3). | (G-426) |
| 7000. Introduction to Historical Research and Writing. (3). | (500) |
| 7120. Studies in British History since 1485. (3). | (515) |
| 7160. Studies in the Soviet Union and World Communism. (3). | (514) |
| 7320. Studies in Ancient History. (3). | (511) |
| 7521. Studies in European Diplomacy (1848-1919). (3). | (512) |
| 7522. Studies in European Diplomacy (1919-1939). (3). | (513) |
| 7630. Studies in Early American History (to 1800). (3). | (521) |
| 7640. Studies in United States History (1800-1865). (3). | (522) |
| 7680. Studies in United States History (1865-1917). (3). | (523) |
| 7700. Studies in United States History (1917-1950). (3). | (523) |
| 7920. Studies in Southern History. (3). | (524) |
| 7940. Studies in the American West. (3). | (525) |
| 7960. Studies in State and Local History. (3). | (527) |
| 7996. Thesis. (6). | (596) |

HOME ECONOMICS

ASSISTANT PROFESSOR MARY ALMA WHITAKER, Acting Chairman
Room 313, Manning Hall

ASSOCIATE PROFESSOR FREEMAN
MRS. SANDS

Requirements for the major and minor in home economics are listed on page 139.

Students interested in planning a program in home economics to meet the entrance requirements established by the American Dietetics Association for postgraduate internship should consult with the department chairman.

CHILD DEVELOPMENT AND FAMILY RELATIONSHIPS

- 1101. Personal Development and Human Relations. (3). (171)**
 Individual and group adjustment, influences contributing to successful marriage and family life. Required of home economics majors in the lower division; open to other students in the lower division.
- 4101. Child Development and Family Relationships. (3). (471)**
 Courtship, marriage, and achievement of satisfaction in present day family life; social, emotional, mental growth of the child; nursery school observation.
- 4201. Nursery School Practicum. (3). (473)**
 Participation in and direction of various nursery school activities.
PREREQUISITE: Home Economics 4101.
One conference, five laboratory hours per week.
- 4301. Nursery School Practicum. (3). (474)**
 For the student who has had or is taking Home Economics 4201 and desires additional experience.

FOODS, NUTRITION AND INSTITUTIONAL MANAGEMENT

- 2102. Food Selection and Preparation. (3). (242)**
 Principles underlying the selection and preparation of foods with an introduction to the planning and serving of meals. Open to freshmen.
One lecture, four laboratory hours per week.
- 2202. Elementary Nutrition. (3). (241)**
 Nutritive value of food, factors influencing body food requirement and health. Open to freshmen.
- 3302. Meal Preparation and Table Service. (3). (341)**
 Nutrition fundamentals in individual and family dietaries, meal planning, marketing and table service for various occasions. **PREREQUISITE:** Home Economics 2102.
One lecture, four laboratory hours per week.
- 3402. Nutrition and Diet Therapy. (3). (342)**
 Dietary problems applicable to the prevention and treatment of disease in which therapeutic diets are of major importance. **PREREQUISITE:** Home Economics 2202 and 3302.
Two lecture, two laboratory hours per week.
- 3502. Quantity Cookery. (3). (351)**
 Practical problems in preparing and serving foods for large groups. Use of standardized recipes, calculation of food costs, and use of institution equipment. **PREREQUISITE:** Home Economics 3402.

- 3602. Institution and Management Practice.** (3). (352)
Observation and practice in handling problems of organization and management of quantity food service.

HOME MANAGEMENT

- 2103. Health of the Family and Home Nursing.** (3). (291)
Building health habits, protection against illness and accidents; simple procedures in caring for the sick. Open to freshmen.
Two lecture, two laboratory hours per week.
- 4103. Home Management and Consumer Education.** (3). (482)
Problems in management of money, time, and energy; study of consumer goods; guides to buying.

RELATED ARTS

- 1104. Art in Everyday Life.** (3). (181)
A study of the art elements and art principles through an analysis of everyday objects.
- 4104. Home Furnishing and Equipment.** (3). (481)
Principles of design and color theory applied to the selection and arrangement of the house and its furnishing; selection, use, and care of equipment.
One lecture, four laboratory hours per week.

TEXTILES AND CLOTHING

- 1105. Clothing Selection and Construction.** (3). (111)
Standards in selecting and purchasing; construction of cotton garments to meet individual needs.
One lecture, four laboratory hours per week.
- 2205. Clothing Construction.** (3). (211)
Fundamental principles of clothing construction, fitting and finishing garments to develop techniques in handling wool, silk, and synthetic fabrics. PREREQUISITE: Home Economics 1105.
One lecture, four laboratory hours per week.
- 3305. Textiles.** (3). (312)
A study of textile fibers used for clothing and house furnishing.
Two lecture, two laboratory hours per week.
- 3405. Consumer Problems in Clothing.** (3). (313)
A course in clothing selection and buying for men and women with emphasis on individual needs and economic problems involved.

INDUSTRIAL TECHNOLOGY

PROFESSOR R. J. COLTHARP, Chairman
Room 100, Industrial Technology Building

ASSOCIATE PROFESSORS BROTHERTON, and SIMMONS

ASSISTANT PROFESSORS HAWKINS, HIRSCHMANN, LAWRENCE, and OGLE
MR. GABRIEL, MR. McALPIN, and MR. WHITE

Requirements for the majors and minors in industrial technology are listed on page 144.

- 1411. Introduction to Engineering.** (3). (141)
Introduction to the engineering profession with emphasis on the slide rule and instrumentation.

1421. **Interpretation of Technical Drawing.** (3). (142)
Various types of drawings as a technique of communication in the industry.
1451. **Surveying.** (3). (145)
Surveying practices, calculations, and use of topographical convention. PREREQUISITE: Industrial Technology 1411 and 1511.
One lecture, four laboratory hours per week.
1511. **Engineering Graphics I.** (3). (151)
Basic drafting practices in the use of instruments, theory of projections, and working drawings.
One lecture, four laboratory hours per week.
1521. **Engineering Graphics II.** (3). (152)
Continuation of Industrial Technology 1511, including basic space relationships of points, lines, planes, and surfaces. PREREQUISITE: Industrial Technology 1511. (Students with two years of high school drafting, or with drafting experience—upon satisfactory completion of a proficiency test—may be permitted to enroll in Industrial Technology 1521).
One lecture, four laboratory hours per week.
1551. **Architectural Design.** (3).
Drawing methods as applied to architectural practice.
Two lecture, two laboratory hours per week.
1611. **Woodwork I.** (3). (161)
Basic hand and machine woodworking processes.
One lecture, four laboratory hours per week.
1711. **Metalwork I.** (3). (171)
Basic hand and machine metalworking processes.
One lecture, four laboratory hours per week.
2451. **Construction Surveying.** (3). (245)
Study of construction layouts and site locations. PREREQUISITES: Industrial Technology 1451 and Mathematics 1212.
One lecture, four laboratory hours per week.
2511. **Descriptive Geometry.** (3). (251)
Representation and space relations of points, lines, and plane intersections.
One lecture, four laboratory hours per week.
2531. **Sheet Metal Drafting.** (3). (253)
Theory and application of principles of lofting, including parallel line, radial, and triangulation methods of development. PREREQUISITE: Industrial Technology 2511.
One lecture, four laboratory hours per week.
2551. **Industrial Design.** (3). (252)
Theory and application of design and principles in industry. PREREQUISITE: Industrial Technology 1511 or 1551.
2561. **Constructive Design.** (3).
Laboratory experience in three-dimensional design for both handcraft and mass production. Woods, metals, and plastics are basic media for work with both models and full-scale design. PREREQUISITE: Industrial Technology 2551.

- 2611. Woodwork II. (3). (261)**
Continuation of Industrial Arts 1611 with emphasis on turning, laminating, and finishing practices. PREREQUISITE: Industrial Technology 1611.
One lecture, four laboratory hours per week.
- 2711. Welding. (3). (271)**
Techniques of gas and electric arc welding. PREREQUISITE: Industrial Technology 1711.
One lecture, four laboratory hours per week.
- 2721. Foundry. (3). (272)**
Study and practice of casting non-ferrous metals. PREREQUISITE: Industrial Technology 1611.
One lecture, four laboratory hours per week.
- 2811. Basic Electronics. (3). (281)**
Study of history, theory, laws, and formula of electronics as related to direct and alternating current, magnetism, motors, and transformers.
Two lecture, two laboratory hours per week.
- 2821. Intermediate Electronics. (3). (282)**
A continuation of Industrial Arts 2811, with emphasis on vacuum tubes, power supplies, amplifiers, oscillators, and test equipment. PREREQUISITE: Industrial Technology 2811.
Two lecture, two laboratory hours per week.
- 2911. Foundations of Industrial Education. (3). (291)**
Study of the development, objectives, and current trends of industrial arts and vocational education; required for teaching endorsement in Industrial Arts. PREREQUISITES: Two of the following courses: Education 2011, 2111, 3121.
- 3385. Driver Education and Traffic Safety. (3). (335)**
Study and practice in the preparation of instructional materials dealing with traffic and safety; care and upkeep of the automobile, and behind-the-wheel instruction. PREREQUISITE: Education major or minor.
Two lecture, two laboratory hours per week.
- 3386. Industrial Safety. (3). (437)**
Study of industrial hazards and safety procedures.
- 3401. Strength of Materials. (3).**
Analysis and study of structural materials. PREREQUISITES: Industrial Technology 1411 and Mathematics 1212.
- 3411. Engineering Materials. (3). (341)**
Study of materials.
- 3421. Manufacturing Processes. (3). (342)**
Study of manufacturing equipment and its uses.
- 3431. Masonry Products. (3). (433)**
Study of cements, concrete, stone, and clay building materials. PREREQUISITE: Industrial Technology 3411.
- 3451. Route Surveying. (3). (345)**
Study of surveying practices as applied to streets, roads, and highways. PREREQUISITE: Industrial Technology 1451 and Mathematics 1212.
One lecture, four laboratory hours per week.

3471. Structural Design. (3).

Design of commercial and residential buildings with emphasis on uses of steel, wood, and masonry. PREREQUISITE: Industrial Technology 3401 and 3411.

3491. Building Specifications and Estimating. (3). (355)

Study and practice of specifications, bidding procedures, and estimating. PREREQUISITE: Industrial Technology 3511.

3511. Architectural Drawing I. (3). (351)

Planning and executing residential preliminary and working drawings, details, and specifications. PREREQUISITE: Industrial Technology 1551.

One lecture, four laboratory hours per week.

3521. Architectural Drawing II. (3). (352)

Continuation of Industrial Technology 3511, including pictorial representations, model building, and furnishings design. PREREQUISITE: Industrial Technology 3511.

One lecture, four laboratory hours per week.

3531. Mechanical Equipment in Construction. (3).

Studies of and planning for services (electrical, heating, cooling, plumbing) in commercial and residential structures. PREREQUISITE: Industrial Technology 1551 or 3511.

3571. Machine Design. (3). (357)

Study and design of basic machine elements. PREREQUISITE: Industrial Technology 2511.

One lecture, four laboratory hours per week.

3591. Tool Design. (3). (359)

Study and design of gages, jigs, fixtures, and their applications in manufacturing processes. PREREQUISITE: Industrial Technology 3421 and Industrial Technology 3571.

Two lecture, two laboratory hours per week.

3611. Machine Woodwork III. (3). (361)

Woodworking machines with emphasis on special operations. PREREQUISITE: Industrial Technology 1611.

One lecture, four laboratory hours per week.

3621. Upholstery. (3). (362)

Fundamentals of upholstery. PREREQUISITE: Industrial Technology 1611 or 3611.

One lecture, four laboratory hours per week.

3631. Forestry Products. (3). (363)

Study and testing of wood and lumber products. PREREQUISITE: Industrial Technology 3411.

3731. Metallurgy. (3). (373)

Study and testing of metals and metal products. PREREQUISITE: Industrial Technology 3411.

3811. Electronic Communications. (3). (381)

Study of transmission and reception of radio signals, including antennas, transmission lines, modulation, and demodulation. PREREQUISITE: Industrial Technology 2821.

Two lecture, two laboratory hours per week.

3821. Industrial Electronics. (3). (382)

Study of electronics in industry, with emphasis on motor controls, high frequency heating and electronic instrumentation. PREREQUISITE: Industrial Technology 2821.

3831. Survey of Electronics. (3).

Brief coverage of applied electronics for prospective teachers. PREREQUISITE: Industrial Technology 2821, with Education major or minor.

Two lecture, two laboratory hours per week.

4351. Clinical Practice in Manual Arts Therapy. (6). (435)

Supervised clinical practice in the Physical Medicine and Rehabilitation Service at Kennedy Veterans Hospital. PREREQUISITE: Senior classification, with major in Industrial Arts Education.

4361. Organization of the General Shop. (3). (436)

Study of problems dealing with the selection and organization of general shop activities. PREREQUISITE: Education 3384.

One lecture, four laboratory hours per week.

4371. Maintenance. (3). (372)

Practices in selection and care of tools, both hand and machine. PREREQUISITE: Industrial Arts Education major and minor.

One lecture, four laboratory hours per week.

4381. Principles of Supervision. (3). (438)

Study of the functions of supervisory personnel.

.4471. Production Control. (3). (447)

Study of the elements of production and their coordination emphasized by visits to industrial plants.

4472. Production Methods. (3). (442)

Practice in wood and/or metal production procedures. PREREQUISITE or COREQUISITE: Industrial Technology 4471.

4481. Plant Layout. (3). (448)

Study of industrial plants, with emphasis on floor plans and placement of facilities. PREREQUISITE: Industrial Technology 4471.

4491. Time and Motion Analysis. (3). (449)

Work simplification, including analysis as applied in time and motion. PREREQUISITE: Industrial Technology 4471.

4811. Transistors. (3).

Study of basic transistor theory and application to elementary circuits. PREREQUISITE: Industrial Technology 3811 or 3821.

Two lecture, two laboratory hours per week.

4944. Problems in Industrial Arts. (3). (434)

Study and research in a specific area. PREREQUISITE: Senior classification, or majors and minors in Industrial Technology who can offer satisfactory evidence of being qualified to benefit by the course.

4951. Fire Safety Problems. (1). (336-A)**4952. Chemical Safety Problems. (1). (336-B)****4953. Electrical Safety Problems. (1). (336-C)****4954. Traffic Safety Problems. (1). (336-D)**

GRADUATE COURSES IN INDUSTRIAL TECHNOLOGY

For course descriptions and further details of the graduate program, see the Bulletin of The Graduate School.

6471. Production Control. (3). (G-447)**6481. Plant Layout. (3). (G-448)****6491. Time and Motion Analysis. (3). (G-449)**

ITALIAN

(See MODERN LANGUAGES)

JOURNALISM

PROFESSOR HERBERT LEE WILLIAMS, Chairman
Room 164, Administration Building

ASSISTANT PROFESSORS LONG, SPENCER, and WESTLAND
MR. SANDERS

Requirements for the major and minor in journalism are listed on page 113.

- 1011. Survey of Mass Communications. (3).** (111)
 Social background, scope, functions, and organization of modern communication media, with attention given to newspapers, magazines, motion pictures, radio, television, books, and comics.
- 1012. Introduction to Modern Journalism. (3).** (112)
 A study of the development of current techniques of writing for publication, with emphasis on the American press.
- 2111. Elementary News Writing. (3).** (211)
 A study of news story structure and the factors that determine the value of news, with consideration given to both the theoretical and practical aspects of news gathering and reporting; lecture and laboratory sessions.
- 2112. Reporting. (3).** (212)
 Gathering and writing news of the University community, with assignments arranged on *The Tiger Rag* or suburban newspapers, or with the University Public Information Office. PREREQUISITE: Journalism 2111.
- 2211. Typography. (3).** (200)
 A lecture-laboratory study of the development of type and the processes of composition, engraving, stereotyping, and printing. Students are provided opportunities to practice the effective use of type and illustration in mass communication.
- 3011. Photojournalism. (3).** (340)
 Selection and arrangement of illustrative material for newspapers and magazines; analysis, use and influence of the news picture; techniques of the picture story; and the role of the picture magazine in the field of communication.
- 3111. Press Photography. (3).** (325)
 Taking pictures with the news camera, developing films, making enlargements, cropping and scaling for publication. Students should bring their own cameras. Open to non-majors with permission of the department chairman.
- 3112. Editing I. (3).** (312)
 Headline writing and editing practices with *The Tiger Rag* used as a laboratory.
- 3113. Editing II. (3).** (313)
 Concentrated practice in editing and copyreading problems. Detailed study of newspaper and magazine page makeup. PREREQUISITE: Journalism 3112.

- 3114. Feature and Article Writing.** (3). (332)
Techniques involved in writing the feature story; study of the magazine market and the specialized requirements of periodicals to which stories are submitted; students will write and submit articles for publication in magazines and newspapers and for acceptance by syndicates.
- 3115. Advanced Reporting.** (3). (322)
Designed to develop further the complete reporter by building on foundations laid in Journalism 212; attention will be given to specialized reporting, including feature stories, sports, society, critical writing, and publicity. PREREQUISITE: Journalism 2112.
- 3116. The Magazine.** (3). (380)
Historical backgrounds, contents, purposes, and readership of general magazines, business and trade papers, and specialized journals, with practice in copy preparation, layout and pictorial display, and production processes.
- 3221. Advertising Copy Writing.** (3). (314)
The principles of advertising psychology studied in relation to the proved techniques for writing effective copy; approximately half of the course is devoted to practice in writing advertisements.
- 3222. Advertising Sales.** (3). (315)
Practical experience in the preparation and selling of completed advertisements; the student will service his own clients throughout the semester, using *The Tiger Rag* as a space medium. PREREQUISITE: Journalism 3221.
- 3223. Advertising Production.** (3). (300)
Principles of typography for advertising composition and display; layout, copyfitting, and type selection in laboratory. PREREQUISITE: Journalism 2211.
- 3331. Radio News Writing and Editing.** (3). (365)
The processing of news for radio, with attention given to radio news style and practice and the preparation of special-events reporting. One lecture per week and four hours per week working in the news rooms of Memphis radio stations.
- 3332. Introduction to Radio-Television.** (3). (360)
A survey of the history of radio and television, principles of transmission and reception of signals, governmental and self-imposed regulations, and the responsibility of the broadcaster; intended to develop an awareness of the social implications of radio and television.
- 3333. Television Writing.** (3). (370)
Writing scripts for telecasts of news, sports, interviews, special events, documentaries, and commercials, with special attention to the necessary studio operations.
- 4001. Law of the Press, Radio, and Television.** (3). (400)
Origin and development of the legal principles affecting freedom of expression, and provisions of the laws of libel, slander, copyright, and other statutes limiting communication in the fields of publishing and broadcasting.

- 4002. Writing Projects. (1 to 3). (401)**
Internship for students who have completed basic journalism courses or whose experience has prepared them to handle the duties; students will work on the staff of *The Tiger Rag* or the *DeSoto*, or work in the office of the University Public Information Office, or will do approved research in journalism. Enrollment limited to journalism majors.
- 4003. Writing Projects. (1 to 3). (402)**
Continuation of Journalism 4002. Enrollment limited to journalism majors.
- 4004. Journalism in the Secondary Schools. (3). (421)**
Organization and direction of journalism courses in the high school; financial problems of high school publications and their relation to educational objectives; public relations and preparation of news releases for school administrators. Intended primarily for those students who expect to teach journalism or to supervise publications in the high school.
- 4005. History of Journalism. (3). (411)**
A study of the origin and development of American journalism; students who enroll in this course should have completed History 2601 and 2602 or the equivalent.
- 4006. Literature of Journalism. (3). (440)**
A bibliographical approach to the field of mass communication, consisting of critical reading of selective works. PREREQUISITE: permission of the department chairman.
- 4111. The Editorial. (3). (412)**
The work of the editor and the editorial writer, with emphasis on editorial problems, methods, policies, and style.
- 4221. Community Newspaper Management. (3). (413)**
A survey of the economic, social, and cultural aspects of small town daily and weekly newspapers, with emphasis on the role of the editor in community life.
- 4222. Public Relations. (3). (450)**
The development, scope, and modern role of public relations, with emphasis on case studies, lectures, and experimentation with major public relations tools and practices.

LATIN

(See CLASSICAL LANGUAGES)

LIBRARY SERVICE

(See CURRICULUM AND INSTRUCTION)

MANAGEMENT

PROFESSOR HERBERT JOHN MARKLE, Chairman
Room 100, The School of Business Administration Building

PROFESSORS CARRIER, FOX, and LARRABEE

ASSOCIATE PROFESSORS BREGER, LOWRY, and TAYLOR

ASSISTANT PROFESSORS BOYD, McMAHON, SHARP and TEMPLETON

MRS. BERFIELD, MR. EDGAR, MR. EMERSON, and MR. JOHNSTON

Requirements for the major and minor in management are listed on page 127.

- 2100. Introduction to Business. (3). (101)**
 A survey course to acquaint beginning business students with the major institutions and practices in the business world, to provide the elementary concepts of business, and to act as an orientation course for selection of a specific major. Both semesters. Open to freshmen only.
- 2710. Clerical Office Machines. (3). (271)**
 Instruction and practice in the operation of the major types of adding and calculating machines; development of a working knowledge of the 10-key and full keyboard adding machine, keydriven and rotary calculators, and other mechanical office devices. Both semesters.
- 3010. Business Law I. (3). (301)**
 Nature and classification of law, contracts, negotiable instruments. Study of selected cases. Both semesters. PREREQUISITE: junior classification or permission of the instructor.
- 3020. Business Law II. (3). (302)**
 Business organization, personal property, trade regulations, with emphasis on case studies. Both semesters. PREREQUISITE: Management 3010.
- 3220. Labor Legislation. (3). (322)**
 Historic and philosophic background for labor legislation with emphasis on recent legislation in the labor area and the effect of these laws on social and economic institutions. Spring semester. PREREQUISITE: Economics 3210.
- 3310. Real Estate. (3). (331)**
 Real estate law, property description, methods of transferring property, joint ownership, tax sales and title to property, inheritance of real property. Spring semester. PREREQUISITE: junior classification or permission of the instructor.
- 3410. Business Organization and Finance. (3). (341)**
 Promotion, organization, and financing of business enterprise; principles underlying selection of business form; structure and trends of American enterprise system; financial management; emphasis is placed on small and medium-sized enterprises. Both semesters. PREREQUISITE: Accounting 2020.
- 3510. Industrial Management I. (3). (345)**
 Development of scientific management; principles and mechanism of organization and management in manufacturing, including plant

location and layout, mass production techniques, standardization conditions, and production controls. Spring semester. PREREQUISITE: Economics 3210.

3710. Business Statistics I. (3). (371)

Procedures of collection, analysis, presentation and interpretation of economic and business data. Both semesters. PREREQUISITE: Mathematics 1291 or equivalent and Economics 2110 and 2120.

3750. Introduction to Data Processing Systems. (3). (381)

A course designed to give an introduction to the characteristics of electronic machines and their use in computation and data processing. The objective is to give the student an understanding of the machines rather than to develop the advanced technical or mathematical aspects. PREREQUISITE: Mathematics 1291.

3810. General Insurance. (3). (335)

Theory, practice, and problems involved with life, fire, marine, casualties, and surety insurance; rates and rating; actuarial activities. Fall Semester. PREREQUISITE: junior classification or permission of the instructor.

4210. Personnel Administration. (3). (421)

Employer-employee relationship; job analysis; recruitment, selection, training, transfer, promotion, and dismissal of employees; industrial unrest; wage plans and policies; employee health, interest, and morale; dealing with unions. Spring semester. PREREQUISITE: Economics 3210 or permission of the instructor.

4220. Collective Bargaining. (3). (422)

Labor-management relations from the standpoint of collective bargaining contracts, with emphasis on the process of negotiating agreements, including procedures, tactics, and subject matter. Fall semester. PREREQUISITE: Economics 3210.

4310. Real Estate Law. (3). (431)

This course covers law and legal instruments as applied to real estate and is designed to serve the needs of property owners and those engaged in the real estate business. PREREQUISITE: Management 3020 and 3310.

4320. Real Estate Finance. (3). (432)

Examination and analysis of the sources of funds for financing all kinds of real estate transactions, including FHA and VA types. PREREQUISITE: Management 3310.

4330. Property Management. (3). (433)

The fundamentals of management of real estate; examination and analysis of problems, duties, and responsibilities of the property manager. PREREQUISITE: Management 3310.

4340. Real Estate Appraisal. (3). (434)

The fundamentals of appraising residential, commercial, and industrial real estate. PREREQUISITE: Management 4320.

4350. Industrial Real Estate. (3). (430)

All phases of industrial real estate practices are covered. These include attractions to industry; financing industrial real estate; appraising industrial real estate; and selecting of industrial sites. PREREQUISITE: Management 3310.

- 4410. Management of Business Enterprise. (3). (442)**
Consideration is given to over-all policy formation and practice in the operation of new and going business concerns, with emphasis on problems of nonfinancial management in the small firm. Both semesters. PREREQUISITE: Management 3410.
- 4420. Human Relations in Business. (3). (443)**
A study of the principles of human relations as applied to business. PREREQUISITE: Management 3410.
- 4510. Industrial Management II. (3). (445)**
A course devoted to solving typical problems that arise in the planning, layout, control, operation, and administration of a manufacturing enterprise. PREREQUISITE: three of the 3000 courses in this major or permission of the instructor.
- 4520. Production Control. (Same as Industrial Technology 4471). (3). (447)**
A study of the elements of production and their coordination emphasized by visits to industrial plants.
- 4530. Plant Layout. (Same as Industrial Technology 4481). (3). (448)**
Study of industrial plants, with emphasis on floor plans and placement of facilities. PREREQUISITE: permission of the instructor.
- 4540. Time and Motion Analysis. (Same as Industrial Technology 4491). (3). (449)**
Work simplification, including analysis of jobs and trades, as applied in time and motion. PREREQUISITE: Management 4520.
- 4550. Statistical Quality Control. (3). (472)**
A course emphasizing the modern statistical approach to the control of industrial quality. Topics treated include the Shewart Control Chart for Variables and Attributes, Acceptance Sampling, and Introduction to the Design of Industrial Experiments. PREREQUISITE: Management 3710.
- 4610. Corporation Finance. (3). (441)**
Advanced treatment of financial management with emphasis on small and medium-sized enterprise and the forces underlying determination of policy; financial problems are considered in connection with refunding, reorganization, mergers, and consolidations. Both semesters. PREREQUISITE: Management 3410.
- 4710. Business Statistics II. (3). (471).**
Extension of the range of topics covered in Business Statistics I to include methods of correlation, analysis of variance, forecasting and general business research. Spring semester. PREREQUISITE: Management 3710.
- 4750. Electronic Data Processing and Programming. (3). (481)**
This course is concerned with programming and operation of electronic data processing equipment. Machine language and programming systems will be studied in detail including FORTRAN and COBOL. Introduction will be made to computer applications to business. PREREQUISITE: Management 3750 or permission of instructor.
- 4760. Application of Computers to Modern Business. (3). (482)**
A continuation of Management 4750, stressing computer application to solution of business problems in such areas as: sales analysis, sales forecasting, accounting, personnel, inventory, management, production

control, and distributive applications. Introduction will also be made to management science applications and simulation. PREREQUISITE: Management 3710 and 4750 or permission of instructor.

4810. Property and Casualty Insurance. (3). (435)

The forms and functions of fire, marine, automobile, general liability, and other types of property and casualty insurance with emphasis on their application to commercial and industrial occupancies. A survey of current underwriting practice. PREREQUISITE: Management 3810.

4820. Life and Health Insurance. (3). (436)

The functions of life and health insurance with emphasis upon the need for insurance and the service of life and health insurance to the American family and community. A study of the mechanics of private and public insurance and annuities. PREREQUISITE: Management 3810.

4830. Insurance Agency Management. (3). (437)

Organization, management, and operation of insurance sales agencies. Equal emphasis is given to the problems and practices of the company-owned and the independent agency. PREREQUISITE: Management 3810.

4910. Management Problems. (1 to 3) (495)

Student will carry on approved research projects in his major area under supervision of staff members. Both semesters. PREREQUISITE: senior standing and permission of the department chairman.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

5010. Law of Taxation of Estates, Inheritances, and Gifts. (3). (S-503)

A survey course of the law of taxation as applied to the transmission of property by gift or death and its impact upon accumulations of wealth. The constitutional basis, statutory implementation, administrative regulation, and court interpretation of the laws of the United States and the various states. PREREQUISITE: Management 3020.

5020. Estate Planning. (3). (S-505)

Estate planning from an individual viewpoint designed to create, maintain, and distribute the maximum estate possible. Consideration is given to the aspects of law, insurance, real estate, investments, and taxes as they relate to the creation of estates by individuals and those who will be engaged in assisting others. PREREQUISITE: Management 5010.

5210. Advanced Industrial Relations. (3). (S-523)

The factors which condition labor-management relations are examined; the nature and significance of labor disputes are analyzed, together with factors involved in their solution. Special attention is given to the growing importance of labor policies and their impact upon labor-management relations and the public in general. PREREQUISITE: Management 4210 or 4220 or consent of instructor.

5410. Advanced Management of Business Enterprise. (3). (S-542)

The development of the top management viewpoint, the basic objective being to develop executive abilities and creative thinking. Selected problem areas of modern business will be explored, alternative courses of action appraised, and decision-making ability developed. PREREQUISITE: Management 4610 and/or 4410.

- 5420. Seminar in Management. (3). (S-543)**
 Special study of selected current problems in this area. For the most part individual studies will be pursued, with group analysis and discussion at regular class meetings. PREREQUISITE: permission of the instructor.
- 5610. Analysis and Control of Business. (3). (S-541)**
 An overall study of management problems and the application of scientific management techniques to the control of various phases of business operation. Included are general management controls, financial management controls, sales management controls, production management controls, and personnel control and appraisal. PREREQUISITE: Management 4610 and/or 4410.

GRADUATE COURSES IN MANAGEMENT

The 4000 and 5000 courses described in the preceding section may be taken for graduate credit. For further details of the graduate program see the Bulletin of The Graduate School.

MARKETING

PROFESSOR CHARLES ROBERT SPINDLER, Chairman
Room 105, The School of Business Administration Building
 PROFESSOR TONNING
 ASSOCIATE PROFESSORS HOUSE and SUMMER
 ASSISTANT PROFESSORS CHAPMAN and INGRAM

Requirements for the major and minor in marketing are listed on page 127.

- 3010. Principles of Marketing. (3). (301)**
 General survey of the marketing structure; development, functions, costs, institutions, and pricing policies. Both semesters. PREREQUISITE: Economics 2110 or permission of instructor.
- 3110. Advertising Copy Writing. (Same as Journalism 3221). (3). (314)**
 The principles of advertising psychology studied in relation to the proved techniques for writing effective copy; approximately half of the course is devoted to practice in writing advertisements.
- 3120. Advertising Design (Same as Art 3221). (3). (315)**
 An introduction to the methods and techniques of advertising layout, with practical problems involving rough, presentation, and finished art work.
Two lecture, two laboratory hours per week.
- 3130. Advertising Design (Same as Art 3222). (3). (316)**
 A continuation of Marketing 3120, offering further study in the technique of newspaper, magazine, and direct-mail layout.
Two lecture, two laboratory hours per week.
- 3140. Principles of Advertising. (3). (351)**
 General survey of the field of advertising including agencies, media, layout, typography, and copy. Both semesters. PREREQUISITE: Marketing 3010 or permission of the instructor.
- 3150. Advanced Advertising. (3). (352)**
 A study of the various phases of advertising with practical applications of advertising methods and procedures. Both semesters. PREREQUISITE: Marketing 3140.

- 3160. Advertising Law and Business Ethics.** (3). (358)
Federal, state, and municipal laws and ordinances affecting advertising; self-regulation by business; review of origin and development of advertising clubs, better business bureaus, and trade and professional organizations.
- 3310. Textiles. (Same as Home Economics 3305).** (3). (312)
A study of textile fibers used for clothing and house furnishing.
Two lecture, two laboratory hours per week.
- 3320. Principles of Retailing.** (3). (381)
Fundamental principles underlying the successful operation of a retail business. Both semesters. PREREQUISITE: Marketing 3010.
- 3330. Buying and Pricing.** (3). (382)
A study of the problems confronting retailers, wholesalers, and other middlemen in properly estimating consumer demand; ascertaining sources of supply; negotiating price and terms with resource; and pricing for resale. Both semesters. PREREQUISITE: Marketing 3320.
- 3410. Salesmanship.** (3). (361)
Basic principles underlying the sales process with actual sales demonstrations and projects in selling. Both semesters. PREREQUISITE: Economics 2110.
- 3420. Sales Theory and Techniques.** (3). (362)
Survey of the literature on salesmanship; creative thinking sessions; portfolio preparation; and demonstrations of "role playing" in the selling function. Spring semester. PREREQUISITE: Marketing 3410.
- 3430. Sales Promotion.** (3). (366)
A study of promotional methods used at the various marketing levels, including planning, media, publicity, displays, contests, and other sales promotion aids. Fall semester. PREREQUISITE: Marketing 3410 or permission of the instructor.
- 3510. Marketing Farm Products.** (3). (321)
Functional, commodity, and institutional problems concerned with marketing farm products including the roles of farmers, cooperatives, government, and food processing industries; also the roles of wholesalers and retailers of food products in getting these products to the ultimate consumer. Spring semester. PREREQUISITE: Marketing 3010.
- 4010. Marketing Administration.** (3). (401)
A case study of actual business marketing problems and the techniques used to solve them. Both semesters. PREREQUISITES: Marketing 3010 and Marketing 3320.
- 4110. Industrial Advertising.** (3). (454)
A study of advertising procedures and techniques which are especially useful to production industries; primary emphasis is placed upon trade papers, catalogs, sales promotional devices, and company advertising budget. Spring semester. PREREQUISITE: Marketing 3140.
- 4120. Television and Radio Advertising.** (3). (455)
A study of the structure of the commercial broadcasting systems of this country; methods of creating radio and television programs and commercials; campaign and broadcast management; media research. Fall semester. PREREQUISITE: Marketing 3140.

- 4130. Retail Advertising, Display and Promotion. (3). (456)**
A study of advertising procedures and techniques which are especially valuable to the retailer; techniques of display and promotion. Fall semester. PREREQUISITE: Marketing 3320.
- 4140. Advertising Agency Management. (3). (458)**
A study of the organization and activities of advertising agencies including management responsibilities, time and space buying, media selection, account executive activities, advertising research, creativity, merchandising, and production supervision. PREREQUISITES: Marketing 4110 and Marketing 4130 or permission of the instructor.
- 4210. Physical Distribution. (3) (420)**
A study of the areas of business responsible for the movement of raw materials and finished products and the development and evaluation of move movement systems. Fall semester. PREREQUISITE: Marketing 3010.
- 4220. Purchasing. (3). (422)**
A study of the organization, principles, policies, procedures and techniques used in effective and efficient procurement by business and industry. Spring semester.
- 4230. Distribution Logistics. (3). (423)**
Examines the management aspects of the firm in moving their raw materials and finished goods, through traffic, warehousing, industrial packaging, material handling and inventory. A systematic examination of trade-off possibilities and management alternatives to minimize cost of product flow and maximization of customer service. PREREQUISITE: Marketing 4210.
- 4310. Home Furnishing and Equipment.
(Same as Home Economics 4104). (3). (481)**
Principles of design and color theory applied to the selection and arrangement of the house and its furnishing; selection, use, and care of equipment.
One lecture, four laboratory hours per week.
- 4320. Retail Policies and Problems. (3). (482)**
A study of the problems which retailers are currently facing and an analysis of the policy decisions they must make to meet these problems effectively. Spring semester. PREREQUISITE: Marketing 3320 or permission of the instructor.
- 4330. Credit and Collections. (3). (485)**
System of credit and collections employed today, significance of credit information, management of charge accounts and credit and collection correspondence. Spring semester. PREREQUISITE: Marketing 3010.
- 4410. Sales Management. (3). (461)**
Problems confronting the sales executive, including control and management of the sales force. Fall semester. PREREQUISITE: Marketing 3410.
- 4420. Sales Supervision and Training. (3). (462)**
A balanced study of two sales management problem areas—sales training techniques and field sales supervision. Textbooks and trade literature are surveyed and compared with practice in current usage. Spring semester. PREREQUISITE: Marketing 4410.

- 4510. Wholesale-Industrial Marketing. (3). (421)**
A study of problems and policies of wholesale and industrial organizations related to their marketing efforts with emphasis on channels of distribution. Fall semester. PREREQUISITE: Marketing 4010.
- 4520. Product Planning. (3). (425)**
Study of a product from the idea stage to placement of the product satisfactorily in the market place. Spring semester. PREREQUISITE: Marketing 4010.
- 4530. International Marketing. (3). (428)**
A study of the bases and promotion of foreign trade; international marketing organizations and methods; technical and financial features of international marketing. Fall semester. PREREQUISITE: Marketing 3010.
- 4540. Cotton Marketing. (3). (435)**
Cotton as a special commodity is traced through the stages of production, processing, and marketing in the raw state; spinning and weaving or knitting; finishing; fabrication; and distribution at the wholesale and retail levels. Fall semester. PREREQUISITE: Marketing 4010 or permission of the instructor.
- 4080. Marketing Research. (3). (491)**
Research methods and procedures used in the field of marketing to help solve business and marketing problems. Both semesters. PREREQUISITES: Marketing 4010 and Management 3710.
- 4910. Problems in Marketing. (1 to 3). (495)**
Students will carry on approved research projects in his major area under the supervision of staff members. Both semesters. PREREQUISITE: senior standing and permission of the department chairman.
- 4991. Work Experience in Advertising. (3 to 6).**
- 4992. Work Experience in Physical Distribution. (3 to 6).**
- 4993. Work Experience in Retail Management. (3 to 6).**
- 4994. Work Experience in Sales. (3 to 6).**
- 4995. Work Experience in Wholesale-Industrial Marketing. (3 to 6).**
Seniors majoring in marketing may, after receiving approval of the department chairman and professor concerned, obtain actual experience by working a minimum of 200 hours in approved organizations. Maximum credit per semester of work experience is 3 hours and student must not enroll for more than 12 academic hours when enrolling for credit in work experience. Both semesters.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

- 5010. Marketing Management. (3). (S502)**
A study of policy determination and functions of the senior marketing executive with reference to delegation of authority; responsibilities of line and staff personnel; planning for growth; and interpreting marketing trends.
- 5020. Pricing and Price Policies. (3). (S521)**
An examination of the role of price in our economy; the problem of price making under conditions of competition, monopoly, monopolistic competition with emphasis on the problems of non-price competition.

- 5030. Seminar in Marketing. (3). (S531)**
 Special study of current problems in marketing. For the most part, individual studies will be pursued with group analysis and discussion.
 PREREQUISITE: consent of instructor.
- 5040. Marketing Thought. (3). (S541)**
 An introduction to the concepts and theories advanced in the development of institutions, channels, functions and processes of marketing and the contribution of other disciplines to marketing theory.
 PREREQUISITE: consent of instructor.
- 5080. Applied Marketing Research. (3). (S592)**
 Development and application of research procedures to actual business problems. PREREQUISITE: Marketing 4080 or permission of the instructor.

GRADUATE COURSES IN MARKETING

The 4000 and 5000 courses described in the preceding section may be taken for graduate credit. For further details of the graduate program see the Bulletin of The Graduate School.

MATHEMATICS

PROFESSOR HOWARD S. KALTENBORN, *Chairman*
Room 310, Administration Building

PROFESSOR STEPHENS

ASSOCIATE PROFESSORS ANDERSON, MCBRIDE, and WALKER

ASSISTANT PROFESSORS BETHANY, CAPLINGER, KALTENBORN, POOLE,
 POTTER, REEVES, and STREET

MR. DAY, MR. FOSTER, MR. HEEN, MR. McEACHERN, MR. McMILLAN,
 MR. MOSLEY, MR. PARRY, MR. PREWITT, MR. SIMPSON,
 MR. WILSON, and MR. WINFREY

Requirements for the major and minor in mathematics are listed on page 114. Mathematics requirements in various schools of the University may be satisfied as follows:

To fulfill the mathematics requirement for the bachelor's degree in The School of Arts and Sciences: Mathematics 1111 and 1112; or 1211 and 1212; or 1321 and 2321.

To fulfill the requirement for the bachelor's degree in The School of Business Administration: Mathematics 1291 or a mathematics course approved by the dean of The School of Business Administration.

Mathematics requirements for the bachelor's degree in The School of Education and for teacher certification are listed on page 136.

- 0211. Basic Mathematics. No credit. (91)**
 Fundamental operations of arithmetic and algebra; exponents and logarithms; factoring, fractions; linear equations; verbal problems.
- *1111. The Structure of Mathematics. (3).**
 Sets; symbolic logic; the postulational method; number fields; equations and inequalities.

- 1112. The Structure of Mathematics.** (3).
 Regulations and functions; coordinate geometry; algebraic graphs; analytic trigonometry; numerical computation; polynomial calculus.
PREREQUISITE: Mathematics 1111.
- 1181. Concepts of Number.** (3). (101)
 Elements of set theory; introduction to logic; number symbols; number systems; fundamental operations of arithmetic.
- 1182. Concepts of Algebra.** (3). (102)
 The structure of elementary algebra; mathematical phrases and sentences; equations and inequalities; applications. **PREREQUISITE:** Mathematics 1181.
- *1211. Basic Mathematics.** (3). (122)
 Exponents; fractions; linear and quadratic functions and graphs; quadratic equations and systems; progressions; interest; binomial theorem; permutations and combinations; probability. **PREREQUISITE:** Two units of high school algebra or geometry.
- 1212. College Algebra and Trigonometry.** (3). (141)
 Axioms for numbers; inequalities; circle relations; trigonometric identities and graphs; polynomials; systems of equations; inverse trigonometric and exponential functions; complex numbers. **PREREQUISITE:** Three units of high school algebra and geometry, or Mathematics 1211.
- 1291. Mathematics for Business.** (3). (107)
 Fundamental concepts of arithmetic and algebra; linear functions and graphs; linear systems; percent; linear programming; matrices.
- 1321. Analytic Geometry and Calculus.** (5). (211)
 Essentials of analytic geometry including the straight line; the nature of derivatives; differentiation of algebraic functions; applications of the derivative; basic concepts of integration and the definite integral; applications of the definite integral. **PREREQUISITE:** 4 units of high school algebra, geometry and 12th grade mathematics, or Mathematics 1212.
- 2291. Mathematics of Finance.** (3). (231)
 Compound interest and annuities, with applications; introduction to mathematics of life insurance. **PREREQUISITE:** Mathematics 1211 or 1212.
- 2321. Analytic Geometry and Calculus.** (5). (212)
 Differentiation, integration and analytical aspects of the transcendental functions; methods of integration; additional topics in plane analytic geometry; hyperbolic functions; polar coordinates. **PREREQUISITE:** Mathematics 1321.
- 2322. Analytic Geometry and Calculus.** (5). (213)
 Introduction to the calculus and algebra of vectors; parametric equations; vectors and analytic geometry in 3-space; partial differentiation; multiple integrals; infinite series. **PREREQUISITE:** Mathematics 2321.
- 2581. Concepts of Geometry.** (3).
 Introduction to the idea of proof in a postulational system; development of the geometric relationships independent of number, including congruent triangles, similar triangles, parallelograms, and circles; ap-

*Credit may be earned in only one of the following courses: Mathematics 1111, Mathematics 1211.

plications of number in geometry including coordinate geometry, lengths, areas, and volumes. PREREQUISITE: Mathematics 1182.

- 2611. Elementary Statistics. (3). (221)**
 Basic statistical concepts; elementary probability theory; normal curve and applications; linear, multiple and partial correlation; statistical inference. PREREQUISITE: Mathematics 1211 or 1212, or Management 3710.
- 3111. Foundations of Mathematics. (3). (351)**
 Euclidean and non-Euclidean geometries viewed from an historical perspective and as purely hypothetical-deductive systems; the modern mathematical method; miscellaneous problems. PREREQUISITE: Mathematics 1321.
- 3112. Foundations of Mathematics. (3). (352)**
 A continuation of Mathematics 3111. Algebraic structures; set theory; development of real and complex numbers; calculus of propositions. PREREQUISITE: Mathematics 3111.
- 3631. Probability. (3). (331)**
 Classical probability theory; stochastic variables; joint distributions; probability density functions; limit theorems; practical applications. COREQUISITE: Mathematics 2322.
- 3651. Mathematical Statistics. (3). (322)**
 Discrete sample spaces; combinatorial theory; special and multivariate probability distributions; moments and moment generating functions; central limit theorem; sampling distributions; point estimators. COREQUISITE: Mathematics 2321.
- 3711. Programming for Digital Computers. (3). (371)**
 Computer organization and characteristics, machine language coding, mathematical subroutines, symbolic coding; applications to root approximation, curve fitting, interpolation techniques, numerical differentiation and integration. PREREQUISITE: Mathematics 2321.
- 4151. History of Mathematics. (3). (421)**
 The development of mathematics from the earliest times to the present; problem studies; parallel reading and class reports. PREREQUISITE: Mathematics 3111.
- 4171. Undergraduate Mathematics Seminar. (1). (495)**
 Readings and discussions of mathematical topics of current interest. PREREQUISITE: permission of the instructor.
- 4172. Undergraduate Mathematics Seminar. (1). (496)**
 Readings and discussions of Mathematical topics of current interest. PREREQUISITE: permission of the instructor.
- 4221. Theory of Numbers. (3). (422)**
 Number theoretic functions; congruences; quadratic residues; Diophantine equations; continued fractions. PREREQUISITE: Mathematics 3111.
- 4222. Theory of Numbers. (3). (423)**
 Quadratic reciprocity; farey fractions; the distribution of prime numbers; algebraic numbers. PREREQUISITE: Mathematics 4221.
- 4241. Linear Algebra and Matrix Theory. (3). (341)**
 Vector spaces, linear transformations and matrices, sets of linear transformations. PREREQUISITE: Mathematics 2322, 3111.

- 4242. Linear Algebra and Matrix Theory. (3). (342)**
 Bilinear and quadratic forms, characteristic values and vectors of linear transformations, canonical forms of matrices. PREREQUISITE: Mathematics 4241.
- 4261. Algebraic Theory. (3). (441)**
 Theory of groups, rings and fields, with applications. PREREQUISITE: Mathematics 3111.
- 4351. Real Analysis. (3). (481)**
 The real number system; limits; sequences and functions; continuity; derivatives; mean value theorems; integration. PREREQUISITE: Mathematics 2322, 3111.
- 4352. Real Analysis. (3). (482)**
 Convergence of series; power series; functions of several variables; mappings; partial derivatives; iterated integrals; improper integrals. PREREQUISITE: Mathematics 4351.
- 4361. Complex Analysis. (3). (491)**
 The complex plane; linear and conformal mappings; analytic functions; complex integration. PREREQUISITE: 2322, 3111.
- 4391. Applied Mathematics. (3). (411)**
 Differential equations with applications. PREREQUISITE: Mathematics 2322.
- 4392. Applied Mathematics. (3). (412)**
 Elliptic integrals; Gamma and Beta functions; Bessel functions; Fourier series; Laplace transform. PREREQUISITE: Mathematics 4391.
- 4411. Introduction to Topology. (3). (361)**
 Introductory set theory; metric spaces; topological spaces; mappings; Hausdorff spaces; connectedness and compactness. PREREQUISITE: Mathematics 2322.
- 4511. Geometric Theory. (3). (461)**
 Foundations of geometry; extensions of Euclidean geometry; non-Euclidean geometry; introduction to projective geometry. PREREQUISITE: Mathematics 3111.
- 4721. Numerical Analysis. (3). (372)**
 Finite differences; approximate solutions of algebraic and transcendental equations, with applications. PREREQUISITE: Mathematics 3711.
- 4722. Numerical Analysis. (3).**
 A continuation of Mathematics 4721; numerical methods for solving applied problems in calculus and differential equations. PREREQUISITE: Mathematics 4721.

(*The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.*)

- 5111. Contemporary Mathematics for High School Science Teachers. (3). (S502-I)**
 A comprehensive review and study of the fundamental principles of arithmetic, algebra, and geometry, with emphasis on applications in biology, chemistry, and physics. *This course will not satisfy any part of the requirement for a graduate minor in mathematics.*

- 5112. Contemporary Mathematics for High School Science Teachers.** (3). (S503-I)
 A continuation of mathematics 5111; basic formulas and processes of trigonometry, analytic geometry and elementary calculus, with applications in chemistry and physics. *This course will not satisfy any part of the requirements for a graduate minor in mathematics.*

GRADUATE COURSES IN MATHEMATICS

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

6151. History of Mathematics.	(3).	(G-421)
6221. Theory of Numbers.	(3).	(G-422)
6222. Theory of Numbers.	(3).	(G-423)
6241. Linear Algebra and Matrix Theory.	(3).	
6242. Linear Algebra and Matrix Theory.	(3).	
6261. Algebraic Theory.	(3).	(G-441)
6351. Real Analysis.	(3).	(G-481)
6352. Real Analysis.	(3).	(G-482)
6361. Complex Analysis.	(3).	(G-491)
6411. Introduction to Topology.	(3).	
6511. Geometric Theory.	(3).	(G-461)
6721. Numerical Analysis.	(3).	
6722. Numerical Analysis.	(3).	
7111. Contemporary Mathematics for High School Science Teachers.	(3).	(502-I)
7112. Contemporary Mathematics for High School Science Teachers.	(3).	(503-I)
7171. Workshop in Junior High School Mathematics.	(2).	(531)
7172. Workshop in Junior High School Mathematics.	(2).	(532)
7173. Workshop in Senior High School Mathematics.	(2).	(541)
7174. Workshop in Senior High School Mathematics.	(2).	(542)
7181. Introduction to Modern Mathematics.	(3).	(501)
7271. Seminar in the Teaching of Algebra.	(1).	(521)
7281. Modern Algebra for High School Teachers.	(3).	(511)
7571. Seminar in the Teaching of Geometry.	(1).	(522)
7581. Modern Geometry for High School Teachers.	(3).	(512)

MODERN LANGUAGES

PROFESSOR CHARLES E. LONG, *Chairman*
Room 206, Jones Hall

PROFESSOR HEATHERLY

ASSOCIATE PROFESSORS BROWN, PELL, and RATIU

ASSISTANT PROFESSORS BRANTLEY, BREWER, CARROLL, DAILEY, MORRISON,

MUSKELLEY, and TERNAY

MR. GAVILONDO, MRS. PULLEN, and MR. SMYTHE

The Department of Modern Languages offers majors and minors in French, German, and Spanish; requirements are listed on page 114. Details of the specific requirements in foreign languages for the various degrees offered by the University are explained on page 100.

FRENCH

IMPORTANT NOTE: All students enrolled in an elementary course in French (1101, 1102) must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for French Drill Class 1101 or 1102, which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

- 1101. Elementary French. (3). (111)**
 Elements of grammar and pronunciation, elementary conversation, and the reading of simple selections.
- 1102. Elementary French. (3). (112)**
 A continuation of French 1101, completing the study of elementary French grammar, elementary conversation and the reading of simple French texts such as *Le Petit Prince* by St. Exupéry.
- 2201. Intermediate French. (3). (211)**
 A review of French grammar with composition, conversation, and the reading of French short stories, designed to increase the student's vocabulary and to contribute to his mastery of idiomatic constructions.
- 2202. Intermediate French. (3). (212)**
 A continuation of French 2201, with greater emphasis on accuracy in oral and written expression and reading for comprehension.
- 2203. French Conversation. (2).**
 Oral practice on subjects of French civilization. Especially recommended for students registered in French 2201. Credit in this course will not apply toward a major or minor in modern languages nor will it satisfy any part of the foreign language requirement for graduation. PREREQUISITE: French 1101 and 1102, or permission of the instructor.
- 2204. French Conversation. (2).**
 A continuation of French 2203; especially recommended for students registered in French 2202. Credit in this course will not apply toward a major or minor in modern languages nor will it satisfy any part of the foreign language requirement for graduation. PREREQUISITE: French 1101 and 1102, or permission of the instructor.
- 2251. French Drama Workshop. (1). (271)**
 Students in this course will work through and produce scenes from well-known French plays, emphasizing good diction and sentence rhythm. PREREQUISITE: Permission of department chairman. *Credit in this course will not apply toward a major or minor in modern languages, nor will it satisfy any part of the foreign language requirement for graduation.*
- 3301. Conversation and Composition. (3). (321)**
 A review of grammatical principles and their application in speaking and writing.
- 3302. Conversation and Composition. (3). (322)**
 A continuation of French 3301.
- 3411. Survey of French Literature. (3). (311)**
 Introduction to the civilization of France through lectures and the readings of representative literary works and writers from the beginnings through the eighteenth century.

- 3412. Survey of French Literature.** (3). (312)
A continuation of the study of French civilization through lectures and reading of representative works of the major writers in the nineteenth and twentieth centuries.
- 3421. The Seventeenth Century.** (3). (331)
A study of the underlying principles of French Classicism in general and of the theatre in particular, with emphasis on works of Corneille, Molière, and Racine and their relationship to the critical theories of Boileau.
- 3422. The Seventeenth Century.** (3). (332)
A study of the representative works in the classical genres, emphasizing the later masterpieces of Molière and Racine, and selected works of Mme. de La Fayette, La Fontaine, Mme. de Sévigné, La Bruyère, and La Rochefoucauld.
- 4301. French Phonetics.** (3).
The theory and practice of French sounds; especially recommended for teachers of French. PREREQUISITE: Three years of college French or permission of the instructor.
- 4421. The Eighteenth Century.** (3). (441)
The novel from Lesage through the eighteenth century and the drama from Lesage through the theatre of Beaumarchais.
- 4422. Liberal Ideas in the Eighteenth Century.** (3). (442)
Study of philosophical thought from the revocation of the Edict of Nantes to the French Revolution, with attention given to Bayle, Montesquieu, Voltaire, Diderot, and Rousseau.
- 4431. The Modern French Novel.** (3). (411)
The French novel from the Revolution to the twentieth century, treating the movements of Romanticism, Realism, and Naturalism as they are reflected in the works of such authors as Balzac, Stendhal, Flaubert, and Zola.
- 4432. The Contemporary French Novel.** (3). (412)
A general survey of the twentieth-century French novel, treating the works of such authors as Proust, Gide, Mauriac, Malraux, Sartre, Camus, Maurois, and others.
- 4451. The Modern French Drama.** (3). (421)
French drama from 1800 to 1870, including such authors as Hugo, de Vigny, de Musset, Scribe, Augier, and Dumas fils.
- 4452. The Contemporary French Drama.** (3). (422)
From Bècque and his school, the *Théâtre Libre*, and Rostand to the present, with emphasis on the twentieth-century drama and such playwrights as Pagnol, Claudel, Tristan Bernard, Giraudoux, Anouilh, Montherlant, Camus, Sartre, Cocteau, and others.
- 4471. Nineteenth-Century Poetry.** (3). (451)
French poetry from Chenier through the Parnassians and the Symbolists.
(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)
- 5401. Old French.** (3).
Introductory seminar. Historical grammar and study of the *Chanson de geste*; also the *Lais* of Marie de France and *Aucassin et Nicolette*.

5421. The French Renaissance. (3).

The new world—literary, as seen in the works of Ronsard and the Pléiade; philosophical and political, in those of Rabelais and Montaigne.

5481. Realism and Naturalism. (3).

The impact of positivism and scientific methods on French literature. Realism in Balzac, Flaubert, and Dumas *filii*; naturalism in Zola, les Frères Goncourt, and the naturalistic theatre.

GRADUATE COURSES IN FRENCH

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

6301. French Phonetics. (3).**6421. The Eighteenth Century.** (3).**6422. Liberal Ideas in the Eighteenth Century.** (3).**6431. The Modern French Novel.** (3).**6432. The Contemporary French Novel.** (3).**6451. The Modern French Drama.** (3).**6452. The Contemporary French Drama.** (3).**6471. Nineteenth-Century Poetry.** (3).**7301. Advanced Grammar.** (2).**7302. Advanced Grammar.** (2).**7401. Old French.** (3).**7421. The French Renaissance.** (3).**7431. Romanticism.** (3).**7481. Realism and Naturalism.** (3).**7491. Proseminar in French Literature.** (3).**7531. The Age of the Enlightenment.** (3).**7995. Thesis.** (3).**7996. Thesis.** (6).

GERMAN

IMPORTANT NOTE: All students enrolled in an elementary course in German (1101, 1102) must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for German Drill Class 1101 or 1102 which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

1101. Elementary German. (3). (111)

Extensive drill in pronunciation, elementary conversation, and aural understanding, and in translating the oral and written language.

1102. Elementary German. (3). (112)

A continuation of German 1101 devoted to further extensive drill in fundamentals.

2201. Intermediate German. (3). (211)

A comprehensive review of German grammar, with readings and exercises designed to increase the student's vocabulary, contribute to his mastery of idiomatic constructions, and introduce him to German literature.

2202. **Intermediate German.** (3). (212)
A continuation of German 2201, with further reading in German literature designed to enlarge the student's vocabulary and improve his pronunciation.
2203. **Scientific German.** (3). (222)
Readings in medical and scientific German. PREREQUISITE: German 2201.
2251. **German Drama Workshop.** (1). (271)
Students in this course will work through and produce scenes from well-known German plays, emphasizing good diction and sentence rhythm. PREREQUISITE: Permission of department chairman. *Credit in this course will not apply toward a major or minor in modern languages, nor will it satisfy any part of the foreign language requirement for graduation.*
3301. **German Conversation.** (3). (331)
Conversations devoted chiefly to material dealing with modern Germany.
3302. **German Composition and Advanced Grammar.** (3). (332)
Translation of English prose into German, with attention given, when necessary, to difficult points of grammar.
3411. **Survey of German Literature.** (3). (311)
A survey of German literature from the beginnings to the Reformation.
3412. **Survey of German Literature.** (3). (312)
A continuation of German 3411, from the Reformation to the early Classicists.
3451. **Nineteenth-Century Drama.** (3). (355)
Selected plays of Kleist, Grillparzer, and Hebbel.
3461. **Nineteenth-Century Prose.** (3). (353)
The shorter works of Tieck, Arnim, Kleist, Eichendorff, Meyer, and others.
3471. **Nineteenth-Century Poetry.** (3). (354)
Poetic works of Klopstock, Novalis, Heine, Uhland, and others.
4421. **Mysticism and the Baroque Period.** (3).
Studies in the writings of the great German mystics, emphasizing their influence on the poetries of the Baroque period.
4441. **The Age of Enlightenment.** (3).
Readings in Lessing (exclusive of the dramas), Wieland, the early Goethe, the early Schiller, and others, with lectures on the philosophical, political, and social backgrounds. PREREQUISITE: German 3412 or permission of the instructor.
4461. **Contemporary Prose and Poetry.** (3). (451)
Analysis and discussion of the short stories of Hauptmann, Mann, Schnitzler, Kafka, and others; and the lyrics of Hofmannsthal, Rilke, George, Benn, and others.
4462. **Contemporary Drama.** (3). (452)
Analysis and discussion of plays by Hauptmann, Toller, Kaiser, Paul Ernst, and others.
4481. **The Classical Period.** (3). (411)
Selected plays by Lessing and Schiller, with lectures on the historical, literary, and philosophical backgrounds.

4482. The Classical Period. (3).

(412)

The major plays and certain prose works of the young Goethe read and discussed in the light of the age and of the author's development.

(The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)

5303. History of the German Language. (3).

The development from Primitive Germanic to New High German.

5401. Old High German. (3).

A specialized study of Old High German grammar and representative extant documents augmented by a comparative study of Older Germanic language, history, and literature.

5481. The Age of Realism. (3).

German literature and thought from 1830 through 1880. Lectures with extensive readings.

5482. Naturalism, Impressionism, and Expressionism. (3).

Literature and philosophical movements from 1880 through 1930. Lectures with extensive readings.

GRADUATE COURSES IN GERMAN

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

6421. Mysticism and the Baroque Period. (3).**6441. The Age of Enlightenment. (3).**

(451)

6461. Contemporary Prose and Poetry. (3).**6462. Contemporary Drama. (3).**

(452)

6481. The Classical Period. (3).

(411)

6482. The Classical Period. (3).

(412)

7301. Advanced Grammar. (2).**7302. Advanced Grammar. (2).****7303. History of the German Language. (3).****7304. Advanced Conversation and Stylistics. (3).****7401. Old High German. (3).****7421. Middle High German. (3).****7431. Romanticism. (3).****7451. Goethe's Faust. (3).****7481. The Age of Realism. (3).****7482. Naturalism, Impressionism, and Expressionism. (3).****7491. Proseminar in German Literature. (3).****7995. Thesis. (3).****7996. Thesis. (6).**

HEBREW

IMPORTANT NOTE: Courses in Hebrew are offered for elective credit only and will not satisfy any part of the foreign language requirement for the baccalaureate degree. Credit will be allowed for a single semester.

1101. Elementary Hebrew. (3).

(111)

An introduction to the Semitic family of languages through Hebrew: the Hebrew alphabet, synthetic morphology in word structure, simple syntax, introduction to composition, reading and writing in Hebrew script.

- 1102. Elementary Hebrew. (3).** (112)
 Conjugation of simple verbs, the active and passive voices, introductory conversation, composition, and the Hebrew short story.
- 2201. Advanced Hebrew Composition. (3).** (211)
 Reading of Modern Israeli poetry and the Hebrew novel. Selected readings from the wisdom literature of the Bible: The Book of Proverbs, the Book of Job, the Book of Ecclesiastes. Readings from the Israeli daily press. Conversational Hebrew. PREREQUISITE: Hebrew 1102 or its equivalent.
- 2202. Advanced Hebrew Composition. (3).** (212)
 Further readings in a survey of Biblical and post-Biblical Hebrew literature. Readings from the prophets: Isaiah, Jeremiah, Ezekiel. Advanced conversational Hebrew. Israelology. Study of the ancient and modern customs and mores of the inhabitants of the land of Israel. The Hebrew Calendar. PREREQUISITE: Hebrew 2201 or its equivalent.

ITALIAN

IMPORTANT NOTE: All students enrolled in an elementary course in Italian (1101, 1102) must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for Italian Drill Class 1101 or 1102 which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

- 1101. Elementary Italian. (3).** (111)
 Elements of grammar and pronunciation, elementary conversation, and the reading of simple selections.
- 1102. Elementary Italian. (3).** (112)
 A continuation of Italian 1101, completing the study of elementary Italian grammar, elementary conversation, and the reading of simple texts.
- 2201. Intermediate Italian. (3).**
 A comprehensive review of Italian grammar with readings, including Italian magazines and newspapers, with exercises designed to increase the student's vocabulary, contribute to his mastery of idiomatic constructions, and introduce him to Italian literature.
- 2202. Intermediate Italian. (3).**
 A continuation of Italian 2201, with further reading in Italian literature designed to enlarge the student's vocabulary and improve his pronunciation.

PORTUGUESE

IMPORTANT NOTE: All students enrolled in an elementary course in Portuguese (1101, 1102) must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for Portuguese Drill Class 1101 or 1102 which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

- 1101. Elementary Portuguese. (3).**
 Elements of grammar and pronunciation, elementary conversation, and the reading of simple selections. PREREQUISITE: one year of college Spanish, or permission of the instructor.
- 1102. Elementary Portuguese. (3).**
 A continuation of Portuguese 1101, with reading selections of increasing difficulty. PREREQUISITE: Portuguese 1101, or permission of the instructor.

RUSSIAN

IMPORTANT NOTE: All students enrolled in an elementary course in Russian (1101, 1102), must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for Russian Drill Class 1101 or 1102, which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

- 1101. Elementary Russian. (3). (111)**
 Extensive drill in the principles of grammar with practice in pronunciation, elementary conversation and aural understanding, and translation.
- 1102. Elementary Russian. (3). (112)**
 A continuation of Russian 1101, devoted to further extensive drill in the fundamentals.
- 2201. Intermediate Russian. (3). (221)**
 A comprehensive review of Russian grammar, with readings and exercises designed to increase the student's vocabulary, contribute to his mastery of idiomatic constructions, and introduce him to Russian literature.
- 2202. Intermediate Russian. (3). (212)**
 A continuation of Russian 2201, with further reading in Russian literature designed to enlarge the student's vocabulary and improve his pronunciation.
- 3441. Russian Literature of the Nineteenth Century. (3).**
 An introduction to the authors and work which herald the Golden Age of Russian Literature, with representative works from Pushkin, Lermontov, Gogol, Oblomov, and Turgenev.
- 3442. Russian Literature of the Nineteenth Century. (3).**
 Readings in representative works of Dostoevski, Tolstoi, Chekov, and Gorki.

SPANISH

IMPORTANT NOTE: All students enrolled in an elementary course in Spanish (1101, 1102), must spend one hour each week in the language laboratory, for which no extra credit is granted. A student may, however, gain one hour credit if he registers for Spanish Drill Class 1101 or 1102, which requires one scheduled hour each week with a foreign assistant and one unscheduled hour in the laboratory.

- 1101. Elementary Spanish. (3). (111)**
 Extensive drill in the principles of grammar, with exercises in pronunciation, elementary conversation and aural understanding, and translation of the oral and written language.
- 1102. Elementary Spanish. (3). (112)**
 A continuation of Spanish 1101, with further extensive drill in the fundamentals.
- 2201. Intermediate Spanish. (3). (211)**
 A comprehensive review of Spanish grammar, with readings and exercises designed to increase the student's vocabulary, contribute to his mastery of idiomatic constructions, and introduce him to Hispanic literature.

- 2202. Intermediate Spanish. (3).** (212)
A continuation of Spanish 2201, with further reading in Hispanic literature designed to enlarge the student's vocabulary and improve his pronunciation.
- 2351. Spanish Drama Workshop. (1).** (271)
A student in this course will work through and produce scenes from well-known Spanish plays, emphasizing good diction and sentence rhythm. PREREQUISITE: Permission of department chairman. *Credit in this course will not apply toward a major or minor in modern languages, nor will it satisfy any part of the foreign language requirement for graduation.*
- 3301. Advanced Composition and Conversation. (3).** (321)
Oral practice on common expressions, followed by written composition and oral discussion on themes pertinent to Hispanic life and literature.
- 3302. Advanced Composition and Conversation. (3).** (322)
A continuation of Spanish 3301, with emphasis on written composition and oral reports on topics related to contemporary Hispanic literature and political affairs. PREREQUISITE: Spanish 3301, or permission of the instructor.
- 3411. Survey of Spanish Literature. (3).** (311)
Formation of the Spanish language and literature, with readings of representative works to illustrate principal periods and genres from the beginnings to 1700.
- 3412. Survey of Spanish Literature. (3).** (312)
A continuation of Spanish 3411, covering Neoclassicism, Romanticism, *costumbrismo*, Realism, Naturalism, contemporary literature, and present trends.
- 3511. Survey of Spanish-American Literature. (3).** (341)
A survey of Spanish-American literature from the Colonial Period to the end of the period of Romanticism.
- 3512. Survey of Spanish-American Literature. (3).** (342)
A survey of Spanish-American literature from the beginnings of Modernism to the present.
- 3611. Survey of Spanish Civilization. (3).**
Spain and its people; Spanish history from Roman times to the twentieth century; highlights of Spanish civilization as revealed in the fields of literature, music, painting, and architecture.
- 3612. Survey of Latin-American Civilization. (3).**
The culture of Latin America, including Brazil and Haiti, as reflected in its history, archaeology, literature, art, and music. The period covered is from the time of Columbus to the present.
- 4301. Spanish Phonetics. (3).**
Principles of Spanish sound-production and introduction to modern Spanish dialectology. This course is especially designed for teachers who wish to broaden their scope of the language and to study the finer points of describing and reproducing the Spanish phonemic system.
- 4421. The Golden Age. (3).** (415)
A detailed study of Spanish lyric poetry and drama up to 1700. PREREQUISITES: Spanish 3411 and 3412, or permission of the instructor.

- 4422. The Golden Age.** (3). (416)
 A detailed study of Spanish prose up to 1700. PREREQUISITES: Spanish 3411 and 3412, or permission of the instructor.
- 4431. Contemporary Spanish Prose.** (3). (412)
 A detailed study of *costumbrismo*, the novel of Realism and Naturalism, and the prose of the Generation of 1898 and after. PREREQUISITES: Spanish 3411 and 3412, or permission of the instructor.
- 4432. Contemporary Spanish Poetry and Drama.** (3). (413)
 A detailed study of Spanish poetry and drama of the nineteenth and twentieth centuries. PREREQUISITES: Spanish 3411 and 3412, or permission of the instructor.
- 4561. Spanish-American Short Story.** (3). (422)
 A critical analysis of Spanish-American short stories as they reflect predominant social and ethical problems, and the authors' responses to literary influences from Europe and North America.
- 4562. Spanish-American Novel.** (3). (423)
 A critical study of representative works by such novelists as Fernández de Lizardi, Blest Gana, Issacs, and Guiraldes.
- 4591. Spanish-American Drama, Poetry, and Essay.** (3). (421)
 A critical study of the development of the drama and poetry of Spanish-America in comparison with and in contrast to the drama and poetry of Spain, and a study of the Spanish-American essay in its political and sociological as well as its literary aspects.

(*The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.*)

- 5401. Old Spanish Language.** (3).
 Castilian phonology, morphology, syntax, and vocabulary, following upon an introduction to the general characteristics of Ibero-Romance and medieval Spanish dialects.
- 5402. Old Spanish Literature.** (3).
 Linguistic and literary study of medieval Spanish texts..
- 5421. The Picaresque Novel.** (3).
- 5431. Nineteenth-Century Spanish Literature I.** (3).
 Romantic and post-Romantic poetry and drama.

GRADUATE COURSES IN SPANISH

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

- 6301. Spanish Phonetics.** (3).
- 6421. The Golden Age.** (3).
- 6422. The Golden Age.** (3).
- 6431. Contemporary Spanish Prose.** (3).
- 6432. Contemporary Spanish Poetry and Drama.** (3).
- 6561. Spanish-American Short Story.** (3).
- 6562. Spanish-American Novel.** (3).
- 6591. Spanish-American Drama, Poetry, and Essay.** (3).
- 7301. Advanced Grammar.** (2).
- 7302. Advanced Grammar.** (2).
- 7401. Old Spanish Language.** (3).

- 7402. Old Spanish Literature. (3).
- 7421. The Picaresque Novel. (3).
- 7431. Nineteenth-Century Spanish Literature, I. (3).
- 7481. The Generation of 1898. (3).
- 7482. The Modernist Movement. (3).
- 7491. Proseminar in Spanish Literature. (3).
- 7995. Thesis. (3).
- 7996. Thesis. (6).

MUSIC

PROFESSOR GEORGE JONES HARRIS, *Chairman*
Room 100, Administration Building

PROFESSOR EAHEART

ASSOCIATE PROFESSORS SMIT and WADE

ASSISTANT PROFESSORS FERGUSON, HERMANN, LABOUNTY, LUBRANI,
 and VAN DE VATE

MISS CHAN, MR. FROCK, and MR. STEFF

Requirements for the major and minor in music are listed on page 114; the program for the Bachelor of Music degree is outlined on page 107. Requirements for the major and minor in music education are listed on page 140.

PIANO PROFICIENCY. All music majors in all degree programs must demonstrate proficiency in piano. This may be done in either of two ways: (1) by acquiring four semester hours of credit in piano in either class or individual instruction, or (2) by passing without credit a proficiency examination in piano based on the level of study described in *Music Education 1614—Class Instruction in Piano*. Students are expected to arrange with the chairman of the department for a time to take the examination during their first semester of residence.

I. THEORY AND COMPOSITION

1041. **Introduction to Music.** (4). (110)
 A bilateral approach to music through (1) a general study of the history of music with emphasis on cultural backgrounds and (2) training in the aural and visual aspects of scales, intervals, and rhythmic patterns.
Three lecture, two laboratory hours per week.

IMPORTANT NOTE: Students registering for any of the following four theory courses must schedule both sections; together these sections constitute a correlated study of the rudiments of music, including harmony, counterpoint, homophonic forms, sight-singing, and ear-training.

1012. **Aural Music Theory I.** (1). (111B)
 Sight-singing and ear-training using the unison material studied in Music 1032; keyboard harmony. COREQUISITE: Music 1032.
Two laboratory hours per week.
1032. **Music Theory I.** (3). (111A)
 Traditional harmony including major and minor scales and triads in all positions in four-part writing. PREREQUISITES: Music 1041 and Music Education 1611, or equivalent ability.

- 1013. Aural Music Theory I.** (1). (112B)
 Continuation of Music 1012 with more difficult unison and easier two-, three-, and four-part material correlated with Music 1033.
COREQUISITE: Music 1033.
Two laboratory hours per week.
- 1033. Music Theory I.** (3). (112A)
 Continuation of Music 1032 up to and including the dominant seventh chord; non-chordal tones; two-part counterpoint; harmonic analysis.
- 2014. Aural Music Theory II.** (1). (211B)
 Continuation of Music 1013 with classwork correlated with Music 2034. **COREQUISITE:** Music 2034.
Two laboratory hours per week.
- 2034. Music Theory II.** (3). (211A)
 Continuation of Music 1033 with attention to secondary seventh chords; modulation to related keys; instrumental style.
- 2015. Aural Music Theory II.** (1). (212B)
 Continuation of Music 2014 with classwork correlated with Music 2035. **COREQUISITE:** Music 2035.
- 2035. Music Theory II.** (3). (212A)
 Continuation of Music 2034 with introduction of altered and highly dissonant chord material; advanced modulation.
- 3021. Canon and Fugue.** (2). (302)
 A study of contrapuntal techniques and the fundamentals of canonic writing; invention, chorale elaboration, two-part canon; analysis of works in contrapuntal style of the eighteenth century. **PREREQUISITE:** Music 3031. (*Individual instruction with added fees as for applied music.*)
- 3022. Canon and Fugue.** (2). (303)
 Multiple-voiced canons; study and writing of the fugue as a form and a style in various media; analysis of contrapuntal literature. **PREREQUISITE:** Music 3021. (*Individual instruction with added fees as for applied music.*)
- 3023. Composition.** (2). (305)
 Free composition in the smaller forms for piano, voice, and chorus; a study of style and analysis of master works. **PREREQUISITE:** instructor's permission. (*Individual instruction with added fees as for applied music.*)
- 3024. Composition.** (2). (306)
 Free composition in the smaller forms and sonatina form for piano, voice, chorus, and small ensembles; style and analysis. **PREREQUISITE:** Music 3023 and permission of the instructor. (*Individual instruction with added fees as for applied music.*)
- 3031. Counterpoint.** (3). (301)
 A study of the modal contrapuntal technique of the sixteenth century; writing in two and three parts in the style of Palestrina and Lassus; analysis. **PREREQUISITES:** Music 1013 and 1033.
- 3033. Form and Analysis.** (3). (308)
 A study of the basic principles underlying the formal structure of music; analyses of outstanding examples of the suite, sonata, and symphony. **PREREQUISITES:** Music 1013 and 1033.

3035. **Instrumentation.** (3). (315)
A study of the compass, possibilities, and tonal characteristics of orchestral and band instruments; arranging of various types of compositions for string, woodwind, and brass ensembles; arranging of piano, organ, and choral compositions for full orchestra; transcriptions of selected works for band. PREREQUISITES: Music 1013 and 1033.
4021. **Composition II.** (2). (405)
Determination of individual style through practical application of contemporary compositional techniques; free composition in the larger forms; analysis of important contemporary compositions. PREREQUISITES: Music 3024 and permission of the instructor. (*Individual instruction with added fees as for applied music.*)
4022. **Composition II.** (3). (406)
Free composition in all forms in various media; contemporary adaptations of older forms; calligraphy and preparation of manuscripts; analysis of contemporary works. PREREQUISITE: Music 4021 and permission of the instructor. (*Individual instruction with added fees as for applied music.*)

II. HISTORY, LITERATURE, AND APPRECIATION

1131. **Music Appreciation.** (3). (319)
An introduction to music through a study of its literature and history; significant compositions are oriented to their proper social, cultural, economic, and political settings in order to bring about the most effective understanding and enjoyment of the music. Open without prerequisite to non-music majors.
3131. **History of Music to 1600.** (3). (401)
A study of the development of the significant musical styles with special attention to the individual contributions of the major composers. PREREQUISITE: permission of the instructor.
3132. **History of Music since 1600.** (3). (402)
A continuation of Music 3131. PREREQUISITE: permission of the instructor.
4100. **Study and Travel in Music.** (3 or 6). (407)
Specialized study and travel under the direction of a faculty member of the Department of Music; a tour of the larger cities of Europe provides for attendance at concerts, visits to museums and other places of cultural importance.
4131. **Comparative Arts.** (3). (411)
Cultural activities in their interrelation with each other and with corresponding historic and economic events. Open without prerequisite to non-music majors of junior and senior standing.
4132. **Modern Music.** (3). (412)
Contemporary music and composers from Debussy to the present time, including the works of Stravinsky, Bartok, Hindemith, Schoenberg, and American contemporaries. Open without prerequisite to non-music majors of junior and senior standing.
4133. **The Opera and the Music Drama.** (3). (413)
A survey of the opera before Richard Wagner; study of Wagner's music dramas and operas of his contemporaries; dramatic and musical significance of each phase of the development of the two forms. Open without prerequisite to non-music majors of junior and senior standing.

- 4134. Piano History, Literature, and Pedagogy.** (3). (414)
 A study of keyboard literature from an historical and pedagogical point of view; emphasis on style and the development of keyboard technique from the time of the harpsichord composers to the present, with practical applications to piano teaching. Open to music and non-music majors with some keyboard facility and to piano teachers.
- 4135. Sacred Music I.** (3). (418)
 Music in the history of the Protestant church; hymnology and the performance of hymns; church choir organization; planning the service; organ and choral repertory. Open without prerequisite to non-music majors of junior or senior standing.
- 4136. Sacred Music II.** (3). (419)
 The development and present significance of Roman, Lutheran, and Anglican liturgical music; its relationship to the worship services of non-liturgical denominations. Open without prerequisite to non-music majors of junior or senior standing.

III. CONDUCTING

- 3235. Choral Conducting.** (3). (316)
 Fundamentals of conducting; organizing and developing choral groups at all levels; rehearsal procedures; materials. PREREQUISITES: Music 1013 and 1033.
- 3236. Conducting and Score Reading.** (3). (317)
 Conducting in both choral and instrumental fields; individual practice with the opportunity for each student to conduct choral and instrumental groups. PREREQUISITE: Music 3235.

IV. APPLIED MUSIC (INDIVIDUAL LESSONS)

Applied music is offered at three levels: (1) preparatory, (2) lower division, and (3) upper division. Lessons are given by members of the University faculty and by special instructors. Practice facilities are provided without charge, but there are additional fees for the individual lessons.

FEES: See page 62, Fees and Expenses. Fees are paid to the University at the office of the Business Manager.

REGISTRATION: Students will register for individual lessons in the same manner and at the same time as they register for other courses. Any inquiries concerning credits or course numbers should be directed to the chairman of the Department of Music.

CREDITS AND GRADES: One semester hour credit will be granted for one thirty-minute lesson weekly; two semester hours credit will be granted for two thirty-minute lessons weekly. Practice hours will be assigned by the instructor to meet the needs of the student. Grades are awarded on the same basis and have the same significance as in other subjects.

EXAMINATIONS: For an examination in applied music, each student will prepare and perform for members of the faculty of the Department of Music suitable musical selections and technical exercises of a grade of difficulty appropriate to his standing. Examinations will be held in the Music Hall on days set aside for this purpose near the end of each semester. Credit for the course will not be awarded to any student who fails to take the examination.

PREPARATORY COURSES

Regardless of his initial degree of advancement, any student of the University may register for individual lessons at the preparatory level except in organ; organ students must have the ability to play the piano before beginning organ instruction.

- 0310. Brasses.** (1).
- 0320. Brasses.** (2).
- 0410. Organ.** (1).
- 0420. Organ.** (2).
- 0510. Percussion.** (1).
- 0520. Percussion.** (2).

- 0610. **Piano.** (1).
- 0620. **Piano.** (2).
- 0710. **Strings.** (1).
- 0720. **Strings.** (2).
- 0810. **Voice.** (1).
- 0820. **Voice.** (2).
- 0910. **Woodwinds.** (1).
- 0920. **Woodwinds.** (2).

LOWER-DIVISION COURSES

Applied music courses in the lower division include the study normally carried out during the freshman and sophomore years. The piano or instrumental student at this level should have had several years of intensive study prior to University entrance so that he has a secure, reliable, and well-grounded technique on his instrument. Organ students may begin at this level provided that they play the piano well and have reasonable ability in sight reading. Requirements for admission to voice study at this level can best be determined by the instructor for the individual student.

Students who fall short of the requirements for admission to the lower-division courses will be advised to register for preparatory courses until deficiencies are eliminated. Course numbers will be repeated for each semester of study.

- 1310. **Brasses.** (1).
- 1320. **Brasses.** (2).
- 1410. **Organ.** (1).
- 1420. **Organ.** (2).
- 1510. **Percussion.** (1).
- 1520. **Percussion.** (2).
- 1610. **Piano.** (1).
- 1620. **Piano.** (2).
- 1710. **Strings.** (1).
- 1720. **Strings.** (2).
- 1810. **Voice.** (1).
- 1820. **Voice.** (2).
- 1910. **Woodwinds.** (1).
- 1920. **Woodwinds.** (2).

UPPER-DIVISION COURSES

Promotion to the upper division does not follow automatically after the completion of four semesters of courses in the lower division but is made only on the recommendation of the instructor; such a recommendation will be made only if the student's proficiency as a performer bears promise of future artistic and professional qualities as a soloist. It is at this level that the student normally begins preparation for a recital.

- 3310. **Brasses.** (1).
- 3320. **Brasses.** (2).
- 3410. **Organ.** (1).
- 3420. **Organ.** (2).
- 3510. **Percussion.** (1).
- 3520. **Percussion.** (2).
- 3610. **Piano.** (1).
- 3620. **Piano.** (2).
- 3710. **Strings.** (1).
- 3720. **Strings.** (2).
- 3810. **Voice.** (1).
- 3820. **Voice.** (2).
- 3910. **Woodwinds.** (1).
- 3920. **Woodwinds.** (2).

V. SMALL ENSEMBLES AND CHAMBER MUSIC

Advanced students are encouraged (and for certain degree plans are required) to participate in these groups. Selection for membership is based on an audition; courses may be repeated with the approval of the student's adviser. Three one-hour meetings per week.

3381. Brass Ensemble. (1).	(366)
3382. Stage Band. (1).	(365)
3581. Percussion Ensemble. (1).	(363)
3681. Piano Ensemble. (1).	(360)
3781. String Ensemble. (1).	(362)
3881. Madrigal Group. (1).	(369)
3882. Opera Workshop. (1).	(368)
3883. Opera Soloists. (1).	(367)
3983. Woodwind Ensemble. (1).	(364)

VI. LARGE MUSICAL ORGANIZATIONS

Large instrumental and choral organizations are maintained on a high artistic and musical level and offer numerous opportunities for all interested and qualified students of the University to participate. Selection for membership is based on an audition; courses may be repeated with the approval of the student's adviser. Three one-hour meetings per week.

1391. Music Education Band. (See page 252 for description).	(174)
1392. University Band. (1).	(175)
1791. Music Education Orchestra. (See page 252 for description).	(172)
1891. Men's Glee Club. (1).	(178)
1892. Women's Glee Club. (1).	(179)
1893. University Glee Club. (1).	(177)
3391. University Band. (1).	(375)
3791. University Orchestra. (1).	(373)
3891. University Chorale. (1).	(377)

GRADUATE COURSES IN MUSIC

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

7030. Composition. (3).	(505)
7031. Theory I. (3).	(511)
7032. Theory II. (3).	(512)
7131. A Study in Musical Styles from 1600 to 1800. (3).	(501)
7132. A Study in Musical Styles from 1800 to Present. (3).	(502)
7133. Choral Literature and Techniques. (3).	(517)
7134. Instrumental Literature and Techniques. (3).	(518)
7231. Advanced Conducting. (3).	(516)
7232. Music Education Seminar. (3).	(520)
7320. Brasses. Individual Instruction. (2).	
7340. Brasses. Individual Instruction. (4).	
7420. Organ. Individual Instruction. (2).	
7440. Organ. Individual Instruction. (4).	
7520. Percussions. Individual Instruction. (2).	
7540. Percussions. Individual Instruction. (4).	

- 7620. **Piano.** Individual Instruction. (2).
- 7640. **Piano.** Individual Instruction. (4).
- 7720. **Strings.** Individual Instruction. (2).
- 7740. **Strings.** Individual Instruction. (4).
- 7820. **Voice.** Individual Instruction. (2).
- 7840. **Voice.** Individual Instruction. (4).
- 7920. **Woodwinds.** Individual Instruction. (2).
- 7940. **Woodwinds.** Individual Instruction. (4).
- 7921. **Chamber Music.** (2).
- 7994. **Recital.** (3).
- 7995. **Thesis.** (3).

MUSIC EDUCATION

PROFESSOR GEORGE JONES HARRIS, Chairman

Room 100, Administration Building

(Faculty listed on page 245)

Requirements for the major and minor in music education are listed on page 140.

See page 245 for statement concerning piano proficiency.

FIELD OF ENDORSEMENT FOR TEACHING. Endorsement may be obtained in either School Music or in Instrumental Music. Normally a student can expect to be recommended in only one of these areas. School Music applicants should be able to play piano accompaniments of average difficulty, should possess an adequate solo voice for school music purposes, and should schedule courses in a wide variety of choral activities. Instrumental Music applicants may satisfactorily meet piano and voice requirements with completion of Music Education 1614 and Music Education 1812, with their prerequisites. Study in one instrument of major emphasis, and participation in concert and marching bands, orchestra and a variety of smaller ensembles will also be required.

(The following courses, Music Education 1311 through 1912, are designed to teach the music education major, already a competent performer in one field, the playing techniques of the major instruments of band and orchestra and the methods of instructing others in these techniques. Practice facilities are provided and there are no additional fees. Each class meets two hours per week.)

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| 1311. Class Instruction in Brass Instruments. (1). | (136) |
| 1312. Class Instruction in Brass Instruments. (1). | (137) |
| 1511. Class Instruction in Percussion Instruments. (1). | (126) |
| 1512. Class Instruction in Percussion Instruments. (1). | (127) |
| 1611. Class Instruction in Piano. (1). | (128) |
| Basic technique, with emphasis on sight-reading. | |
| 1612. Class Instruction in Piano. (1). | (129) |
| Playing of songs used in school music teaching; community songs and hymns; exercises written in music theory classes. | |
| 1613. Class Instruction in Piano. (1). | (130) |
| Simpler Bach chorales, more difficult songs, and accompaniments appropriate to the student's major field; memorization optional. | |

- 1614. Class Instruction in Piano. (1). (131)**
 Selected easier studies and compositions by Czerny, Concone, Beethoven, Chopin, Schumann, Bartok, and others.

- 1711. Class Instruction in Stringed Instruments. (1). (132)**

- 1712. Class Instruction in Stringed Instruments. (1). (133)**

- 1811. Class Instruction in Voice. (1). (139)**

- 1812. Class Instruction in Voice. (1). (140)**

- 1911. Class Instruction in Woodwind Instruments. (1). (134)**

- 1912. Class Instruction in Woodwind Instruments. (1). (135)**

(The two following courses, Music Education 1391 and 1791, provide familiarity with materials and routines suitable for use with school orchestras and bands; they enable a student who plays his major instrument in the University orchestra or band to gain needed playing experience on other instruments and also enable voice, piano, and organ majors to gain ensemble experience. Either course may be repeated for additional credit, or students may participate without credit. Each course meets three hours per week.)

- 1391. Music Education Band. (1). (174)**

- 1791. Music Education Orchestra. (1). (172)**

- 3231. Music for Children. (3). (123)**

A consideration of appropriate musical experiences for children in the school, church, and home. Philosophy, aims, materials, methods. Music appreciation as related to a study of instruments of the orchestra and to representative composers of the period 1650-1825. A functional use of music is approached through practice in the electronic piano laboratory and with easy-to-play instruments. Major scales and key signatures; sight-singing with syllables and numbers; rhythm and meter studies. No prior training in music is required. Not open to music majors and minors.

- 3232. Music for Children. (3). (124)**

A continuation of Music Education 3231; minor scales, primary chords, musical styles and composers since 1825. PREREQUISITE: Music Education 3231.

- 3233. Teaching for Appreciation in Grades 1 through 9. (3). (325)**

The listening experience and other related music activities as an approach to the appreciation of music. PREREQUISITE: permission of the instructor.

- 4201. Special Problems in the Teaching of Music. (1 to 3). (421)**

This course provides for class or individual study of the problems and opportunities faced by the person who teaches music in the schools; for classroom teachers, music teachers and supervisors, principals, and administrators.

- 4231. Music Supervision in Grades 1 through 9. (3). (321)**

The teaching, supervision, and administration of music; basic concepts, philosophy, and objectives of music education.

- 4232. Materials and Methods in Instrumental Music. (3). (331)**

Developing the band or orchestra; balance and tone quality; conducting and interpretation; problems of intonation; literature for solos, ensembles, and groups of all grades.

OFFICE MANAGEMENT

(See SECRETARIAL SCIENCE AND OFFICE MANAGEMENT)

PHILOSOPHY

PROFESSOR WILLIAM BRYAN BARTON, JR., *Chairman*

Room 104, Humanities Building

ASSOCIATE PROFESSOR VAN DE VATE

ASSISTANT PROFESSOR JAMES

Philosophy Honors Program. This program is reserved for those students who have a grade-point average of 3.0 or better. The student will be expected to prepare himself through course work and reading for a comprehensive examination to be given during the spring semester of his senior year. He will also be expected to do a senior essay in which he will demonstrate independent work. The essay will be 30 or more pages. The subject must be approved before the semester in which he intends to graduate.

Those students majoring in philosophy must choose their program for the first year from the following: Philosophy 1111, 1221, or 1611. They will be advised to take two of the above, one for each term rather than two at the same time. See page 115 for requirements for the major and minor in philosophy.

1111. Introduction to Philosophy. (3). (111)

An introduction to philosophy through the great problems arising from man's reflection on the knowledge and nature of the world and human conduct in it. A study is made of some of the great books in philosophy where these problems are discussed.

1221. The Philosophy of Plato. (3).

Readings will be from Plato's dialogues. This constitutes an introduction to Western philosophy through a study of one of the great figures, Socrates, and his disciple, Plato. Plato's ethical and political views, his theory of ideas, theory of knowledge and art will be discussed.

1611. Elementary Logic. (3).

(112)

An introduction to the principles of valid reasoning with emphasis on the nature of language, the fundamentals of deductive and inductive inference, and the use of logic as a practical human instrument.

2211. History of Ancient and Medieval Philosophy. (3).

(311)

Important systems of thought of ancient and medieval philosophy, with selected readings from the great philosophers.

2311. History of Modern Philosophy. (3).

(312)

An introduction to the great philosophers since the Renaissance, with special emphasis on Descartes, Spinoza, Hume, Kant, Hegel, Fichte and the great political and social philosophers of the nineteenth century.

2411. The Conflict of Ideals in Contemporary Civilization. (3). (221)

The philosophical implications of important current issues, with attention to the philosophical presuppositions of the cultural, intellectual, political, and economic conflicts of the modern world. Readings from contemporary authors.

- 2511. Introduction to Ethical Thought.** (3). (222)
An elementary course in ethics with emphasis on a critical analysis of the principle ethical theories and their practical application to the problems of the individual and society. Readings from the great classics in the field.
- 3232. The Philosophy of Aristotle.** (3).
This course constitutes an introduction to the thought of Aristotle and its problems. The reading will be from the *Categories*, *Physics*, *Metaphysics*, *De Anima*, and the *Nicomachean Ethics*. PREREQUISITE: Philosophy 1221 or 2211.
- 3351. British Empiricism.** (3).
A critical and historical review of the philosophies of Locke, Berkeley, and Hume. Special attention will be given to the place of British Empiricism in modern thought. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3371. From Kant to Hegel.** (3).
The development of Kantian philosophy and its influence in the philosophies of Fichte, Schelling, and Hegel. PREREQUISITE: Philosophy 2311, or permission of the instructor.
- 3421. The Rise of Analytic Philosophy.** (3).
The development of the views of analytic philosophers from Russell and Wittgenstein to Ayer, Wisdom and others. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3451. The Rise of Existentialism.** (3).
A historical and comparative study of the different existentialist writers and their relation to literature, religion and psychology. Readings from Kierkegaard, Nietzsche, Jaspers, Heidegger, Sartre, and Marcel. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3521. Contemporary Ethical Theory.** (3). (322)
This will be a study of the works of the outstanding contemporary philosophers, such as Moore, Dewey, Stevenson, and Toulmin. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3662. Philosophy of Science.** (3).
An examination of the basic features of science. A detailed analysis of the problems of scientific procedure, theory construction, and verification both in the physical and social sciences will be made. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3711. Philosophy of Religion.** (3). (313)
The contribution of philosophy to the basic issues of religion; a recognition of the principles which make religion valid throughout all its diverse forms and in the face of advancing scientific knowledge. PREREQUISITE: one semester of philosophy, or permission of the instructor.
- 3721. The Philosophy of Living Religions.** (3). (314)
A historical and comparative survey of the philosophies of contemporary non-Biblical religions of the world, with readings in the important literature: Hinduism, Buddhism, Confucianism, Taoism, Islam, etc. PREREQUISITE: one semester of philosophy, or permission of the instructor.

- 3761. The Philosophy of Art.** (3). (315)
The major forms of aesthetics as expressed in painting, sculpture, and music, with readings in the great classics in aesthetics. PREREQUISITE: one semester of philosophy, or permission of instructor.
- 4011. Theory of Knowledge.** (3). (412)
The basic problems of epistemology, with readings in the important philosophers. PREREQUISITE: two courses in philosophy, or one course and permission of the instructor.
- 4021. Metaphysics.** (3). (413)
An analysis of the basic metaphysical concepts and a critical study of old and new theories of the nature of being. PREREQUISITE: two courses in philosophy, or one course and permission of the instructor.
- 4031. The Hegelian Tradition.** (3).
An intensive study of certain aspects of Idealism with special attention to the thought of Hegel, Fichte, and Bradley. PREREQUISITE: two courses in philosophy.
- 4301. American Philosophy.** (3). (415)
The development of philosophical traditions in the United States from Jonathan Edwards to the present and their relationship to social and cultural history. PREREQUISITE: two courses in philosophy. History and English majors may be admitted with one philosophy course.
- 4431. Recent Problems in the Philosophy of Language.** (3). (414)
A study is made of the basic characteristics of scientific language; the problems of meaning and existence are given close attention. PREREQUISITE: two courses in philosophy.
- 4441. Phenomenology and its Historical Background.** (3).
A reading and discussion of basic texts in translation of Husserl's *Ideas*, *Cartesian Meditations* and from the *Crisis of European Science and Phenomenology*. PREREQUISITE: two courses in philosophy.
- 4632. Advanced Logic.** (3). (411)
The nature of axiomatic systems, techniques of formalization, and the logical foundations of mathematics. PREREQUISITE: one course in philosophy, or permission of the instructor.

GRADUATE COURSES IN PHILOSOPHY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

- 6011. Theory of Knowledge.** (3). (G-412)
- 6021. Metaphysics.** (3). (G-413)
- 6031. The Hegelian Tradition.** (3).
- 6301. American Philosophy.** (3). (G-415)
- 6431. Recent Problems in the Philosophy of Language.** (3). (G-414)
- 6441. Phenomenology and its Historical Background.** (3).
- 6632. Advanced Logic.** (3). (G-411)
- 7411. Seminar in the Problems of Current Philosophy.** (3). (511)
- 7412. Seminar in the Problems of Current Philosophy.** (3). (512)

PHYSICAL EDUCATION

(See HEALTH AND PHYSICAL EDUCATION)

PHYSICAL SCIENCES

(See CHEMISTRY AND PHYSICS)

PHYSICS

(See CHEMISTRY AND PHYSICS)

POLITICAL SCIENCE

PROFESSOR ERWIN CLYDE BUELL, *Chairman*

Room 411, School of Business Administration Building

ASSISTANT PROFESSORS BRIGMAN, MAHOOD, MORROW, and SAWYER

Requirements for the major and minor in political science are listed on page 115.

For information concerning the pre-law curriculum, see page 103.

- 1101. Introduction to Political Science. (3). (121)**
Nature and development of the state, role of government in the social process, the nature and development of political organization, and the search for a just balance of authority and freedom.

- 1301. Survey of Modern Foreign Governments. (3). (122)**
A comparative study of political institutions and functions of selected foreign governments: Great Britain, France, Germany, Russia, and Switzerland.

- 2211. National Government. (3). (221)**
The origins of our system of government, the framing of the Constitution, the principles underlying constitutional government, citizenship, civil rights, political institutions, the national executive, the congressional organization and function, and the judicial process.

- 2221. State and Local Governments. (3). (222)**
The role of the state governments in the Federal System, political institutions, elections; the organization, functions, and problems of state government, with special emphasis on Tennessee government.

- 3211. The Legislative Process. (3). (311)**
The origins, organization, functions, and activities of the modern legislature; making laws, supervising the administration, representing and informing the people.

- 3216. Politics and Pressure Groups. (3). (313)**
The development, nature, and functions of political parties; nature and function of pressure groups, and their roles in politics.

- 3224. Municipal Government. (3). (312)**
Structure and policy making; functions and administrative operation; and problems facing the modern city.

- 3306. Latin American Government and Polities. (3). (321)**
The forms of organization, the functions and operations of government in Latin America. Emphasis will be placed on the development of political institutions and present day trends.

- 3401. History of Western Political Thought.** (3). (341)
The history, formation, and development of political thought of the West, beginning with the political philosophers of ancient Greece and tracing the development of Western political theory and constitutionalism.
- 3405. Introduction to Law and Jurisprudence.** (3). (315)
A study of the sources, functions, and processes of law.
- 3501. International Politics.** (3). (331)
A basic study of international relations, with emphasis on the methodology of international politics as a discipline and the basic political concepts of national policy and international politics.
- 3505. International Organization.** (3.)
The history and nature of international organizations; political and ideological concepts toward international cooperation. The United Nations, the regional organizations, and international welfare and/or administrative agencies are used as specific studies.
- 3506. American Foreign Policy.** (3). (411)
An analysis of American foreign policy, with emphasis on the factors involved in developing and implementing policy.
- 3601. Public Administration.** (3). (314)
The concepts and practices of organization and management in the executive departments, national, state, and local; an analysis of bureaucracy, administrative theory, budgeting, personnel, and administrative leadership.
- 3602. Public Personnel Administration.** (3).
A study of the problems of the administrator in recruitment, selection, training, promotion, discipline, and morale of personnel.
- 4211. The Constitution: Governmental Structure and Relationships.** (3). (414)
An analysis of the relationships and controls of the three branches and the nature of the division of power between the nation and the states, with emphasis on the role of the Supreme Court as the arbiter in the constitutional system.
- 4212. The Constitution: Political and Civil Rights.** (3). (415)
An examination of the judicial interpretation of the political and civil rights with emphasis on the period since 1875.
- 4213. Development of United States Domestic Policy.** (3). (412)
A study of the formation and execution of selected domestic policies (fiscal, economic, agriculture and conservation, welfare, grants-in-aid) with a detailed examination of the political and administrative environment of governmental decision making.
- 4224. Municipal Problems.** (3). (413)
A study of selected problems in municipal administration (organization, personnel, fiscal, planning).
- 4301. British Government and Politics.** (3). (423)
The nature and development of the British Constitutional system, with special emphasis placed on the Cabinet, Parliament, and the Commonwealth organization and function.
- 4305. Soviet Government and Politics.** (3). (422)
Organization and function of the authoritarian state, with emphasis on the role of the Communist Party and ideology.

- 4401. Modern Political Ideologies.** (3). (351)
 A study of authoritarianism and democracy as represented by a comparison of democracy, socialism, communism, and fascism.
- 4405. American Political Thought.** (3). (431)
 An analysis of political thought in the United States from the colonial to the present time, with emphasis placed on the relation between political thought and political institutions and practices.
- 4504. International Law.** (3). (432)
 An analysis of the nature, scope, duties, rights, and evolutionary trends of international law.
- 4506. Problems of American Foreign Policy.** (3).
 A study of American foreign policy problems taken from specific areas or issues of policy.
- 4601. Policy and Administration.** (3).
 A study of the role of the administrator in the formulation of public policy; an examination of the processes, problems, and effects of executive influence in legislation and adjudication.
- 4604. Problems of Public Administration.** (3).
 An examination of the administrative processes, including an investigation of laws, the powers, procedures, and the limitations upon administrative offices and agencies.
- (The following are graduate courses for which undergraduates within 36 semester hours of graduation may enroll.)*
- 5106. The Political System.** (3).
 A systematic analysis of the elements of the political system, showing the interrelationship of political culture (values, beliefs, attitudes, concensus), the formal and informal patterns of power, the patterns of interest, and the pattern of policy.

GRADUATE COURSES IN POLITICAL SCIENCE

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

- 6213. Development of United States Domestic Policy.** (3). (G-412)
- 6224. Municipal Problems.** (3). (G-413)
- 6301. British Government and Polities.** (3). (G-423)
- 6506. Problems of American Foreign Policy.** (3).
- 6601. Policy and Administration.** (3).
- 6604. Problems of Public Administration.** (3).
- 7106. The Political System.** (3).
- 7201. Seminar in United States Political Institutions and Thought.** (3). (531)
- 7301. Seminar in Comparative Political Institutions and Thought.** (3). (521)

PSYCHOLOGY

PROFESSOR JAMES RAYMOND McCANN, Chairman
Room 211, Johnson Hall

ASSOCIATE PROFESSORS ANDERSEN and BOONE

**ASSISTANT PROFESSORS BORRESEN, CONSALVI, HACKETT,
 LEEMING, LUPFER, and SPRUNT**

MR. CLOAR, MR. DEWS, MISS LAND, and MR. LONG

Requirements for the major and minor in psychology are listed on page 115.

IMPORTANT NOTE: Psychology 1101 and 1102 are prerequisite for all other courses in the Department of Psychology.

1101. General Psychology I. (3).

(111)

An introduction to psychology as a basic science emphasizing research findings and theoretical interpretations in the investigation of human behavior. Areas covered include individual differences, social processes, aptitudes and vocational adjustment, intelligence, personality, and behavior pathology.

1102. General Psychology II. (3).

(112)

A continuation of Psychology 1101. Areas covered include sensation and perception, motivation and emotion, learning and retention, and physiological mechanisms.

2101. Psychology in Business and Industry. (3).

(212)

Attitudes, morale, skill, motivation, fatigue, and other psychological factors important in employer and employee relations in business and industry.

2102. Social Psychology. (3).

(213)

A study of the influences of group behavior and cultural traditions upon the individual's vocational, domestic, and social adjustments. The psychological factors in the major problems of today.

2201. Sensation and Perception. (3).

(216)

Detailed survey of the major senses with emphasis on methods of investigation and behavioral applications. Study of the perceptual processes involving interactions between senses and influences of learning and motivation on perception.

2202. Motivation. (3).

(217)

Consideration of the concepts of instinct, drive, and motive, with an integration of animal and human studies in this area.

2301. Quantitative Methods. (3).

(215)

Elementary statistics with primary emphasis on computation. Measures of central tendency and variability with introduction to tests of significance and correlation.

3101. Psychology of Personality. (3).

(311)

The development, organization, and assessment of the normal personality with an introduction to the nature of personality theory.

3102. Psychology of Behavior Disorders. (3).

(312)

A survey of basic concepts of psychopathology with emphasis on the development of behavior deviations; description of various neurotic and psychotic reactions; an introduction to methods of psychotherapy.

- 3103. Developmental Psychology. (3). (316)**
 Patterns of intellectual and behavioral development from birth through the adolescent years. Psychological effects of genetic, organic, and environmental influences as the child matures.
- 3201. Learning and Behavior Modification. (3). (314)**
 Critical examination of dominant concepts and principles involved in a general theory of behavior with emphasis on the role of habit formation and acquisition of motives.
- 3202. Experimental Psychology. (4). (315)**
 Methods and techniques of controlled experimentation in the areas of motivation, learning, and perception. Emphasis on and experience with theoretically oriented research. PREREQUISITE: Psychology 2301.
Three lecture, two laboratory hours per week.
- 4101. History of Psychology. (3). (411)**
 A general orientation course covering the historical antecedents and systems of psychology. PREREQUISITE: 12 semester hours in psychology, including Psychology 3201.
- 4201. Physiological Psychology. (3). (412)**
 A study of the physiological functions involved in behavior and experience. Surveys the physiology of the sense organs, nervous system, and response mechanisms. PREREQUISITE: 12 semester hours in psychology, including Psychology 3201.
- 4202. Comparative Psychology. (3). (418)**
 Detailed study of laws of heredity and interactions of genetic factors and environmental factors as applied to individual and species differences in behavior. Survey of differences between species as to processes underlying behavior including sensation and perception, learning and motivation, and intelligence. PREREQUISITE: 12 semester hours in psychology, including Psychology 3201.
- 4301. Advanced Quantitative Methods. (3). (413)**
 A follow-up to Psychology 2301 with emphasis on standard errors of all commonly used statistics as well as the analysis of variance, Chi Square, and non-parametric tests. PREREQUISITE: Psychology 2301.
- 4302. Psychological Appraisal. (3). (417)**
 Introduction to the development and application of psychological tests. Survey of instruments and techniques currently used in the psychological appraisal of the individual. PREREQUISITE: 12 semester hours in psychology, including Psychology 3201.
- 4401. Psychology of Exceptional Children. (3). (414)**
 Home and school problems of handicapped, retarded, emotionally unstable, precocious, or gifted children. PREREQUISITE: 12 semester hours in psychology, including Psychology 3103 or 3201.

GRADUATE COURSES IN PSYCHOLOGY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

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| 6101. History of Psychology. (3). | (G-411) |
| 6201. Physiological Psychology. (3). | (G-412) |
| 6301. Advanced Quantitative Methods. (3). | (G-413) |
| 6302. Psychological Appraisal. (3). | (G-417) |

6401. Psychology of Exceptional Children. (3).	(G-414)
7201. Theories of Learning. (3).	(501)
7202. Theories of Personality. (3).	(502)
7203. Seminar: General. (3).	(541)
7204. Seminar: General. (3).	(542)
7205. Advanced Social Psychology. (3).	
7301. Psychometrics. (3).	(503)
7401. Contemporary Approaches to Psychotherapy. (3).	(511)
7402. Measurements of Intelligence. (3).	(521)
7403. Projective Techniques. (3).	(522)
7404. Directed Practicum. (1 to 3).	(531)
7405. Directed Practicum. (1 to 3).	(532)
7406. Directed Practicum. (1 to 3).	(533)
7410. Seminar: Clinical. (3).	(543)
7411. Seminar: Clinical. (3).	(544)
7995. Thesis. (3).	(593)
7996. Thesis. (6).	(596)

RUSSIAN

(See MODERN LANGUAGES)

SECRETARIAL SCIENCE AND OFFICE MANAGEMENT

PROFESSOR RIENZI WILSON JENNINGS, *Chairman*
Room 107, The School of Business Administration Building
 ASSOCIATE PROFESSORS JOHNSON, ROBERTS, and PEEPLES

ASSISTANT PROFESSORS PATTERNSON and TREECE
 MISS BILLETT and MRS. BROWN

Requirements for the majors and minors in secretarial science and in office management are listed on page 129.

- 1110. Personal Use Notehand.** (2). (111)
 Presentation of a brief, easy-to-learn writing method and an application of this system to help the student learn more and learn faster. Applications of notemaking to studying, listening, reading, outlining, composing and making notes at meetings and conferences. Three meetings per week.
- 1210. Elementary Typewriting I.** (3). (121)
 Use and operation of the parts of the typewriter, mastery of the keyboard, simple business and professional letters and reports, introduction to tabulations. Four meetings per week. Both semesters. Students who have completed one or more units of typewriting in high school may not take Secretarial Science 1210 for credit.
- *1220. Elementary Typewriting II.** (3). (122)
 Typing manuscripts, legal documents, and the several styles of business letters; tabulations; operation of duplicating machines; development of a typing rate of better than 45 words per minute. Both semesters.

*Credit is allowed in only one of the following courses: Secretarial Science 1220, Secretarial Science 2230, Secretarial Science 3240.

- 2120. Fundamentals of Shorthand I. (3). (211)**
 Basic principles of simplified Gregg shorthand—alphabet, brief forms, phrases, and abbreviations; beginning dictation and pre-transcription training. Both semesters. Students who have completed one or more units of shorthand in high school may not take Secretarial Science 2120 for credit.
Two lecture, two laboratory hours per week.
- 2130. Fundamentals of Shorthand II. (3). (212)**
 Further study of shorthand theory, acquisition of ability to take rapid dictation and transcribe accurately. Enrollees must be able to type or be enrolled in Secretarial Science 1220 or Secretarial Science 3250 while taking this course. Both semesters. PREREQUISITE: Secretarial Science 2120 or permission of the instructor.
Two lecture, two laboratory hours per week.
- *2230. Typing for General Business. (3). (222)**
 An advanced typewriting class of nonsecretarial majors. Emphasis is placed on acquiring ability to set up business letters, forms, and statements, including tabulation. Both semesters. PREREQUISITES: High School Typing, Secretarial Science 1210 or permission of the instructor.
- 3140. Advanced Shorthand I. (3). (311)**
 Review of shorthand principles, daily speed practice, development of transcription skill for production of mailable transcripts. Both semesters. PREREQUISITE: Secretarial Science 3250 or Secretarial Science 1220.
- 3150. Advanced Shorthand II. (3). (312)**
 A continuation of Secretarial Science 3140, providing additional training and practice for the development of greater dictation and transcription speed. Emphasis is placed on mailable transcription at vocational levels. Spring semester. PREREQUISITE: Secretarial Science 3140.
Two lecture, two laboratory hours per week.
- 3250. Advanced Typewriting. (3). (321)**
 Review of business letter styles, manuscripts and reports, statistical tables, and the tabulating and electronic-computer systems of data processing. Development of a typing rate of better than 60 words per minute. Both semesters. PREREQUISITE: Secretarial Science 1220.
- *3240. Personal Use Typewriting. (3). (322)**
 Personal and business letters, reports, themes, and manuscripts. Summer term. Not acceptable for credit toward a Secretarial Science major. PREREQUISITE: Secretarial Science 1210 or permission of the instructor.
- 3510. Business Communication. (3). (351)**
 The fundamentals of business communication are examined and studied with a view to a thorough understanding of the techniques of report writing and of some of the basic forms of letters. Emphasis is placed on the writing of reports, financial statements, minutes of meetings, abstracts, and specific types of routine letters. Attention is also given to selection and use of research mediums. The importance of capitalization, spelling, word division and choice, and of grammar are emphasized. PREREQUISITE: Completion of Freshman English plus the ability to type.

*Credit is allowed in only one of the following courses: Secretarial Science 1220, Secretarial Science 2230, Secretarial Science 3240.

3520. **Business Letter Writing.** (3). (352)
Psychology of the business letter, preparation of various types of business letters, letter writing problems. Spring semester. PREREQ-USITE: Ability to type and Freshman English.
3310. **Secretarial Office Machines.** (1 or 3). (371)
Instruction and practice in the use of secretarial office machines including: electric typewriters; transcribing from voice-writing equipment; ink and spirit duplication; lettering guides and styli; and the IBM keypunch. Students who desire instruction only on the IBM keypunch may register for one hour credit. Spring and summer semesters. PREREQUISITE: Secretarial Science 3250 and Secretarial Science 3510.
4260. **Secretarial Typewriting.** (3). (421)
Production typing with emphasis on vocational standards for office positions including typing from copy and from voice writing equipment. Spring semester. PREREQUISITE: Secretarial Science 3310.
4320. **Applied Secretarial Practice I.** (3). (431)
Qualifications, duties and training of a secretary; requirements for employment; organization of work; telephone etiquette; business reference books; receptionist techniques. Fall semester.
4330. **Applied Secretarial Practice II.** (3). (432)
Handling of incoming and outgoing mail; filing procedures; installation, administration, and control of geographic, numeric, subject and Soundex filing systems; practice in the several types of filing. Spring semester.
4160. **Secretarial Dictation.** (1 or 3). (433)
Students will do stenographic work in some office on campus. The instructor, after conferring with the office head, will plan remedial work designed to prepare student for stenographic employment upon completion of course. Both semesters. PREREQUISITE: Permission of the instructor.
Three or nine hours of office work per week.
4410. **Office Management I.** (3). (442)
Modern methods used in office organization and management, including role of office management, scientific office management, office reports, office correspondence, calculating and checking, filing, records retention, duplicating, handling the mail, planning procedures, planning for equipment, office machines, automation, planning for office space, physical working conditions and office layout. Fall semester.
4530. **Executive Communication.** (3). (452)
Methods and techniques of communication are critically examined through the writing of case problems in correspondence with emphasis placed upon principles and correct writing; and in reports with importance placed upon the collection, analysis, organization, and presentation of authentic data. Open to graduating seniors and to graduate students, the course is primarily designed for the student who has had no basic study in either business correspondence or business report writing on the graduate level.

(The following is a graduate course for which undergraduates within 36 semester hours of graduation may enroll.)

5420. **Office Management II.** (3). (S-542)
Problems in actuating office employees and controlling the work of the office, including motivating office personnel, job evaluation,

recruiting and training office employees, office supervision, standards and standardization, quantity and quality control, improving procedures, simplification, office forms, measuring and timing office work, office manuals, office costs, and budgets.

GRADUATE COURSES IN SECRETARIAL SCIENCE AND OFFICE MANAGEMENT

Certain of the 4000 and 5000 courses, described in the preceding section, may be taken for graduate credit. For further information concerning the graduate program, see the Bulletin of The Graduate School.

SOCIOLOGY AND ANTHROPOLOGY

PROFESSOR CHARLES NEWTON, *Chairman*
Room 104A, Humanities Building

PROFESSORS GORDON and STEWART

ASSOCIATE PROFESSOR McNUTT

ASSISTANT PROFESSORS ENOCH, HASAN, and HENDERSON

MR. GARZA, MR. NASH, MR. NEWSOM, and MR. ROBERTS

Requirements for the majors and minors in sociology and in anthropology are listed on page 116. For information concerning the pre-social work curriculum, see page 103.

IMPORTANT NOTE: Sociology 1111 is a prerequisite for all other courses in sociology.

SOCIOLOGY

- 1111. **Society and Man.** (3). (211)
Nature and significance of culture; social organization and social processes; social and culture change.
- 2112. **Contemporary Social Problems.** (3). (421)
Investigation, analysis, and discussion of current social problems.
- 2410. **The Modern Community.** (3). (212)
The community and its provisions for health, education, recreation, safety, and welfare; recent trends in control and planning.
- 2420. **The Family.** (3). (312)
The family in social change, the family and personality, family organization, family disorganization and reorganization, families in foreign lands, the future of the American family.
- 2911. **Survey of the Field of Social Work.** (3). (423)
History and philosophy of social work in the United States, functions of public and private social service programs, qualifications and opportunities for social work practice.
- 3311. **Social Statistics.** (3). (426)
Statistical and non-statistical approaches employed in contemporary social research, review and analysis of important monograph findings, practical applications derived from recurring social behavior.
- 3320. **Sociometry.** (3). (311)
Structures of social units; techniques and tools utilized in small group research; collection and interpretation of sociometric data.

3322. Methods of Social Research I. (3).

An introduction to the selection and formulation of a research problem; the design of the research project, including sampling procedures; the methods of field observation, questionnaire construction, and participant observation techniques; the analysis and interpretation of research data; the preparation of the research report. PREREQUISITE: Sociology 3311.

3323. Methods of Social Research II. (3).

An extension of Sociology 3322 emphasizing the methods of the research interview; special techniques used in the study of small groups; the use of secondary sources, including the methods of content analysis; techniques of community studies; and the use of calculators and computers in sociological research. PREREQUISITE: Sociology 3322.

3430. Social Control. (3).

(321)

The problem of social control, internalizing social control, social structures and institutions in the maintenance of order, improving social control.

3440. Social Stratification. (3).

(323)

Social classes and social status; power, prestige, and social opportunities of the upper, middle, and lower classes; cross-cultural analysis of social stratification; social mobility.

3450. Dynamics of Social Change. (3).

A sociological analysis of the theory, nature, meaning, and consequences of social change.

3521. Criminology. (3).

(411)

Theories of causation, crime as a business, affiliated problems, trends in punishment, treatment of offenders, control and prevention.

3730. Social Attitudes. (3).

(322)

Personal and popular attitudes, attitudes and wishes, attitudes as social forces.

3811. Social and Ethnic Minorities. (3). (Same as Anthropology 3811)

A comparative study of social and ethnic minorities in the United States and elsewhere with a focus on differences in cultural backgrounds, social relationships with the larger society; social, educational, and legal problems; factors contributing to the satisfactory and unsatisfactory adjustments of minorities.

3820. Educational Sociology. (3).

(416)

Sociological analysis of education and its functions; school and community relationships; problems of social change and educational adjustments.

3841. Industrial Sociology. (3).

(413)

Social characteristics of business and industrial organizations; role of the consultant in personnel organization and human relations programs.

3912. Methods and Social Work. (3).

(424)

Theory and practice in social work, social casework, social group work, the interview, analysis of case records, field observation in local social agencies.

3913. **Group Processes in Community Organization.** (3). (425)
Community organization and the utilization of citizen groups, action research, group process techniques, orientation and application for social work and other fields.
4211. **Modern Sociological Theories.** (3). (422)
European contributions, American developments, recent trends and influences in sociological theory.
4222. **History of Social Thought.** (3). (419)
Emphasis on the historic sources of social ideas in Western culture in terms of their relevance to contemporary systematic theory.
4522. **Analysis of Juvenile Delinquency.** (3). (420)
Trends of juvenile delinquency; the development of case study techniques and diagnosis of juvenile delinquency; comparative analysis of various theoretical approaches. PREREQUISITE: Sociology 3521.
4523. **Techniques of Criminal Investigation.** (3).
A description, analysis, and demonstration of historical and contemporary techniques and procedures utilized in the apprehension of the criminal.
4610. **Population.** (3). (417)
Population theories and policies; their definition and history. Trends in population growth; methods of population analysis, and trends in fertility and mortality. Emphasis on fertility, mortality, sex and age composition, and migration and their influences on population change.
4620. **Human Ecology.** (3). (444)
Spatial structure and land use patterns of urban, rural, and fringe areas; city growth, its spatial and communicative extension into suburban and rural areas, and its impact on the economy, values, and social organization of communities.
4710. **Social Psychology.** (3). (418)
A study of the social development of the individual and of the underlying sociological and psychological process of human behavior.
4720. **Collective Behavior.** (3). (412)
Emergence of collective behavior, spontaneous collectivities, social movements, social consequences of restrictive collective behavior.
4812. **Race Relations.** (3). (445)
A study of ethnic organization and interrelations with specific emphasis on the status of the Negro in American society, and the process of integration.
4830. **Directed Individual Study.** (1 to 4). (499)
Individually directed advanced reading and/or research in special areas of interest. PREREQUISITE: permission of department chairman.
4842. **Sociology of Occupations and Professions.** (3). (414)
Sociological analysis of the division of labor, occupational groupings, career patterns, and professional associations in modern American society.
4843. **Human Relations in Business. (Same as Management 4420).** (3). (415)
A study of the principles of human relations as applied to business.

ANTHROPOLOGY

- 1100. Introduction to Physical Anthropology.** (3). (211)
Man's place in nature, human origins, the fossil record from archaeological excavations, the biological aspects of race.
- 1200. Society and Culture.** (3). (212)
Theoretical frameworks within which social and cultural processes are analyzed, interpreted, and understood; comparative studies of human cultures.
- 2211. Survey of Old World Ethnology.** (3).
Survey of major culture areas in Europe, Asia, Africa, and Oceania, placing these in historic perspective, and studying selected sample peoples in each area.
- 2212. Survey of American Indian Ethnology.** (3).
Survey of major culture areas of North and South America, placing these in historic perspective, and studying selected sample peoples in each area.
- 2312. Survey of World Archaeology.** (3). (311)
Human origins and culture history from the stone age through the rise of earliest civilizations as revealed by comparative study of materials from abandoned occupation sites in Africa, Asia, and Europe. Last two weeks devoted to archaeological field techniques pointing toward summer field work.
- 2313. Survey of American Indian Archaeology.** (3). (312)
Theories of ancient human migrations into the New World, development of major culture sequences as revealed by comparative analysis of materials from abandoned Indian habitations, emphasis on the rise of pre-Columbian civilizations in Mesoamerica. Last two weeks devoted to archaeological methods.
- 2321. Archaeological Field Techniques.** (3). (221)
Experience in field excavations conducted at Chucalissa Museum; preparation of specimens, use of survey instruments, photographing and keeping archaeological records, map making of small ground areas. Hours individually arranged for either one or both summer terms. PREREQUISITE: permission of department chairman.
- 2322. Archaeological Field Techniques.** (3). (221)
- 3035. Indians of the Tennessee Area.** (3).
A survey of the archaeology of the South East, with intensive study of the various Indian cultures of Tennessee and bordering states.
- 3111. Physical Anthropology and Human Paleontology.** (3).
A comparative study of primate anatomy, physiology, and behavior; detailed examination of the Momimid Fossil record; and a summation of Population Genelici and human variability.
- 3225. Ethnological Field Techniques.** (3).
Methods of collecting and interpreting data pertaining to contemporary societies; personal problems involving conflicts in cross-cultural research.
- 3381. Research Techniques and Museum Operation I.** (3). (314)
Individual instruction with a focus on the methods of analysis and the planning of displays. PREREQUISITE: permission of department chairman.
- 3382. Research Techniques and Museum Operation II.** (3). (315)
A continuation of Anthropology 3381.

- 3411. Mechanics of Communication.** (3). (325)
 Nature and usefulness of symbols, mechanisms by which they are communicated, relation of symbolic systems to thought and culture, comparative techniques used to reconstruct prehistoric languages.
- 3811. Social and Ethnic Minorities.** (3).
 (Same as Sociology 3811).
 A comparative study of social and ethnic minorities in the United States and elsewhere with a focus on differences in cultural backgrounds, social relationships with the larger society; social, educational, and legal problems; factors contributing to satisfactory and unsatisfactory adjustments of minorities.
- 4065. History of Anthropological Theory.** (3).
 The growth, theory, and method in anthropology leading to modern historical, sociological, and psychological interpretations.
- 4254. Culture Change in Non-literate Society.** (3).
 Internal and external factors causing change in the small-scale society; theories of cultural evolution; social changes involved in the emergence of civilization; changes involved in industrialization; studying the "human career."
- 4751. Culture and Personality in Non-literate Society.** (3).
 Comparison of factors involved in the analysis of personality as contrasted to culture; the interaction of these factors; problems of studying personality cross-culturally.
- 4995. Senior Seminar in Anthropology.** (3).
 Problems in contemporary anthropology; may be offered in sections dealing with different topics; field trips and individual assignments.

GRADUATE COURSES IN SOCIOLOGY

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

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|---|---------|
| 6211. Modern Sociological Theories. (3). | (G-422) |
| 6222. History of Social Thought. (3). | (G-419) |
| 6522. Analysis of Juvenile Delinquency. (3). | (G-420) |
| 6523. Techniques of Criminal Investigation. (3). | |
| 6610. Population. (3). | (G-417) |
| 6720. Collective Behavior. (3). | (G-412) |
| 6812. Race Relations. (3). | (G-445) |
| 6830. Directed Individual Study. (1 to 4). | (G-499) |

SPANISH

(See MODERN LANGUAGES)

SPECIAL EDUCATION

(See CURRICULUM AND INSTRUCTION)

SPEECH AND DRAMA

PROFESSOR HARRY AUSPRICH, *Chairman*
Room 107, Humanities Building

PROFESSORS BENCE and WHITE

ASSOCIATE PROFESSORS RAPP and RIGGS

ASSISTANT PROFESSORS MALIN, PARK, PRENDEVILLE, and YELLIN
MR. HERZOG, MR. KEMPSTER, MR. SCHON, and MR. SHIFFRIN

The Department of Speech and Drama offers majors in general speech; rhetoric and public address; radio and television; speech pathology and audiology; and theatre and oral interpretation; the requirements for these majors and for the minor are listed on page 116.

Through its affiliation with the Memphis Speech and Hearing Center and television station WKNO, the University is able to offer its students the facilities of these institutions; members of the staff of the Speech and Hearing Center and WKNO teach courses on the campus in speech pathology, audiology, radio, and television.

INTRODUCTORY COURSES

***1011. Business Speech. (3).** (101)

Basic principles of oral communication, with attention to the speaking situation of the business world.

1211. Basic Principles of Voice and Diction. (3). (121)

Principles of effective voice usage, including special attention to the individual voices of the class members; designed to improve voice characteristics and diction.

***1311. Basic Principles of Public Speaking. (3).** (111)

Adjustment to the speaking situation with emphasis on research, analysis, speech organization, and effective voice usage.

1411. Basic Principles of Oral Interpretation. (3).

Studies and practice in the oral performance of literature based on examination of the language, structure, and meaning of that literature.

1551. Introduction to Theatre. (3). (150)

A consideration of all the dramatic elements of the theatre from the viewpoint of the audience, designed to enhance and improve the student's appreciation of theatrical performances.

THEATRE

2511. Stagecraft. (3). (251)

A lecture-laboratory course covering basic elements of scenery construction, painting, and stage properties.

2521. Play Direction. (3). (252)

A study of the fundamentals of play direction, including composition, picturization, blocking, and movement. Practice in the direction of the one act play and scenes from longer plays.

*Credit may be earned in only one of the following courses: 1011, 1311.

2531. **Elementary Acting.** (3). (253)
A lecture-laboratory course covering the basic techniques and principles of acting.
2541. **Stage Make-up.** (2).
Fundamentals of straight and character make-up. The application of the principles governing line, color, and light and shade to make-up problems. Practical experience in make-up through various productions. *One lecture, two laboratory hours per week.*
3501. **Theatre Laboratory.** (1). (300-1)
Preparation for and participation in University dramatic activities. One hour credit each semester for three hours of supervised laboratory work per week.
3502. **Opera Laboratory.** (1). (300-5)
A laboratory course for students who are cast in principal roles in the annual grand opera.
3521. **Advanced Play Direction.** (3). (352)
A lecture-laboratory course covering the advanced principles of play directing, the history of directing, and the problems encountered in directing classic and modern plays. PREREQUISITE: Speech 2521.
3531. **Advanced Acting.** (3). (353)
A survey of acting styles from classicism to the present. PREREQUISITE: Speech 2531.
3551. **History of the Theatre.** (3). (354)
A history and survey of drama from Aeschylus to Turgenev.
3552. **History of the Theatre.** (3). (355)
A history and survey of drama from Ibsen to Ionesco.
3561. **Theatrical Design.** (3). (351)
The planning and practice of scene design for plays of all periods. PREREQUISITE: Permission of the instructor.
4511. **Stage Lighting.** (3). (452)
The planning and execution of lighting for stage productions. PREREQUISITE: Permission of the instructor.
4551. **Theatre History.** (3).
Special problems in theatre history: the men and ideas which have shaped the theatre of the western world from antiquity to the present.
4561. **Stage Costuming.** (3). (451)
A survey of historic dress and the planning and rendering of costume designs for plays of all periods. PREREQUISITE: Permission of the instructor.
Two lectures, two laboratory hours per week.
4571. **Playwriting.** (3). (457)
A study of the theory and principles of writing plays for the stage. Practice in writing either the short or long play.
4581. **Dramatic Theory and Criticism.** (3).
The major documents in dramatic theory and criticism from Aristotle to the present.

ORAL INTERPRETATION

- 2411. The Art of Oral Interpretation.** (3). (245)
A continuation of Speech 1411, with emphasis on more complex analysis and performance of the forms of literature.
- 3401. Oral Interpretation Laboratory.** (1) (300-3)
Preparation for and participation in oral interpretation activities, including experiments in individual and group forms such as the recital program and Readers Theatre. One hour credit each semester for three hours of supervised laboratory work per week.
- 3451. Readers' Theatre.** (3). (346)
A study of the theory and practice of staging prose, poetry, and drama in the styles of Readers and Chamber Theatre. Special attention will be given to point-of-view and aesthetic distance. PREREQUISITE: Speech 2411.
- 4421. Interpretation of Poetry.** (3).
Studies in the style and structure of poetry of specific types and periods, as related to the response and performance of the oral interpreter. PREREQUISITE: Speech 2411.
- 4431. Interpretation of Prose.** (3).
Studies in the oral interpretation of prose fiction, with attention to various literary styles and structures. PREREQUISITE: Speech 2411.
- 4441. Interpretation of Drama.** (3). (445)
Theory and practice in the oral presentation of drama. Class performances are from plays by modern authors, Shakespeare, and the Greek dramatists. PREREQUISITE: Speech 2411.

RHETORIC AND PUBLIC ADDRESS

- 2311. Public Speaking.** (3). (112)
Organization and delivery of speeches of various types, including discussion techniques and speeches for special occasions; attention is given to developing the student's ability to analyze and criticize speech performances. PREREQUISITE: Speech 1311, or permission of the instructor.
- 2321. Argumentation and Debate.** (3). (231)
The principles of argumentation, analysis, evidence, and the organization of the argumentative discourse.
- 2331. Parliamentary Procedure and Group Leadership.** (3). (232)
The study of the development of rules of conduct for deliberative bodies; practice and criticism in the use of parliamentary procedure; techniques of group leadership with special emphasis on clubs and small organizations.
- 3011. Advanced Business and Professional Speaking.** (3).
An advanced course in the study of speech as a business and professional tool. Particular emphasis will be placed on analysis and performance in the conference and interview situations which are a part of the day-to-day function of the business man.
- 3301. Forensics Laboratory.** (1). (300-2)
Organized preparation for and participation in competitive speech activities including debate, discussion, original oratory, extemporaneous speaking, oral interpretation, and after-dinner speaking. One hour credit each semester for three hours of supervised laboratory work per week.

- 3311. Advanced Public Speaking. (3). (332)**
 Application of public speaking principles to complex public address situations; additional performances before community groups.
- 3321. Advanced Argumentation and Debate. (3). (330)**
 Advanced principles of argumentation applicable to deliberative and forensic speaking, including the preparation of debate cases and participation in intercollegiate debates.
- 3341. Discussion. (3). (331)**
 Study and practice of the principles and techniques of discussion, dealing with current problems of wide interest and significance.
- 4351. Persuasion. (3). (433)**
 Advanced theory of the psychology of speech, investigation of audience motivation, the theory of persuasive techniques, and practical application of all of these.
- 4361. History and Criticism of British Public Address. (3).**
 A study and analysis of British speakers and speaking from the 16th century to the present time. Emphasis will be placed on the speech situation, audience, issues and speakers. Such men as Fox, Pitt, Sheridan, Burke, Disraeli, and Churchill will be considered.
- 4362. History and Criticism of American Public Address. (3).**
 An analysis of political, religious and social speaking from colonial times to the present. Such men as Clay, Emerson, Lincoln, Webster, and the Roosevelts will be considered.
- 4363. The Greek Tradition in Rhetoric and Oratory. (3).**
 A study of the varying influences on, and movements within, the progressive development of the Greek tradition in rhetorical theory, practice, criticism, and pedagogy from Homer to the Renaissance.
- 4364. Modern Rhetorical Theory: 1700 to the Present. (3).**
 The study of the development of rhetorical theory in England, France, and America with particular emphasis on contributors and movements in the 18th and 19th centuries.
- 4371. Speech Criticism. (3). (435)**
 Problems in the theory and criticism of classical and modern rhetorical works; application of the principles of rhetoric to the critical evaluation of current public speaking practice.

RADIO AND TELEVISION

- 2811. Fundamentals of Broadcasting. (3). (280)**
 A survey of the development of AM and FM radio and television with emphasis on structure, programming, and control; the role of radio and television in education, entertainment, and public service; methods used in evaluating audience interest and motivation. PREREQUISITE: Sophomore standing and permission of the instructor.
- 2821. Radio Production I. (3). (281)**
 A study of the principles of radio performance and production with specific instruction in audio, microphones, role of the radio director, acting, announcing, and the integration of these elements into the total radio production. PREREQUISITE: Speech 2811.
- 2822. Radio Production II. (3). (282)**
 Advanced training in radio production with emphasis on the documentary, dramatic program, and special events format. The programs will be taped and played on local radio stations. PREREQUISITES: Speech 2811 and 2821.

2831. Radio and Television Announcing. (3).

Concentrated work in basic techniques of announcing for radio and television. Different announcing formats will be considered: commercials, news, sports, weather, and special events. PREREQUISITE: Speech 2811.

3801. Radio/Television Laboratory. (1).

(300-4)

Preparation for and participation in all phases of radio and television. One hour credit each semester for three hours of supervised laboratory work per week.

3841. Television Production I. (3).

(381)

The elements of television production techniques including camera, audio, lighting, staging, graphics, and on-camera appearance. Practical experience in class production of television programs utilizing the facilities of WKNO-TV. PREREQUISITE: Speech 2811 and 2821.

3842. Television Production II. (3).

(382)

Techniques of television production including the producing and directing of television programs at WKNO-TV. PREREQUISITE: Speech 3841, or permission of the instructor.

3851. Television Performance. (3).

(383)

Problems of the television performer; adaptations in composition and interpretation which the medium requires of the announcer, narrator, master of ceremonies, and actor. Performance situations designed to aid in the development of performance skills. PREREQUISITE: Speech 2811.

3861. Radio and Television Dramatic Writing. (3).

(384)

Study and practice in writing for the broadcast media. Emphasis is placed on writing unit programs in dramatic form, including adaptations, documentaries, and original plays. PREREQUISITE: Speech 3841, or permission of instructor.

4841. Television Production III. (3).

(481)

An intensive study of the more advanced techniques of television production and direction. Special emphasis on the dramatic and children's formats with regard to their unique production problems. PREREQUISITE: Speech 3842.

4871. Television Management and Programming. (3).

(482)

A study of the principles of broadcast management and programming with special attention to station operation, the role of the producer-director, and the productions of local programs. PREREQUISITE: Speech 2811.

PATHOLOGY AND AUDIOLOGY

The following three courses are prerequisite to all other courses in speech pathology and audiology.

2611. Phonetics. (3).

(261)

Knowledge and practice in the use of the International Phonetic Alphabet; consideration of the physiology of the ear and vocal mechanism.

2621. Principles and Methods of Speech Correction. (3).

(262)

An introduction to the principles and methods of correcting speech and hearing disorders, with scheduled observations and demonstrations at the Memphis Speech and Hearing Center.

- 2631. Audiology. (3). (263)**
An introductory course dealing with the theory and technique practiced in audiometry and speech reading.
- 3631. Auditory Training and Speech Reading. (3). (364)**
Evaluation of hearing losses by means of speech audiometry; methods in auditory training; methods in lip-reading training. PREREQUISITES: Speech 2611, 2621, 2631.
- 3641. Communication: Anatomy and Physiology. (3). (361)**
An introduction to the anatomy and physiology of the hearing and vocal mechanism with attention to pathology affecting speech and voice. PREREQUISITE: Speech 2611, 2621, and 2631.
- 3651. Functional Speech Disorders. (3). (362)**
A detailed study of the techniques and methods of correcting speech disorders which frequently have no organic basis. Those disorders emphasized most are stuttering, delayed speech, and poor articulation. Observations in the Memphis Speech and Hearing Center. PREREQUISITES: Speech 2611, 2621, 2631.
- 3661. Organic Speech Disorders. (3). (363)**
A detailed study of the techniques and methods of correcting speech disorders of organic origin. The disorders most emphasized are cleft palate, aphasia, voice problems, cerebral palsy, and language disorders. Observation in the Memphis Speech and Hearing Center. PREREQUISITE: Speech 3641.
- 3681. Management of the Preschool Deaf Child. (3).**
A study of the language development of the normal and hearing-handicapped child with emphasis on prelinguistic utterances of infancy, language comprehension, and the role of gesture language. Study of the effects of a hearing impairment upon the mental, social, and emotional development of the preschool child. PREREQUISITE: Speech 3631.
- 4601. Clinical Speech and Hearing Practicum. (3). (462)**
One hundred hours of supervised experience in evaluating and conducting therapy with children and adults who have communicative handicaps. This work is done in the Memphis Speech and Hearing Center and in other rehabilitation agencies, schools, and hospitals. PREREQUISITE: Permission of the instructor.
- 4602. Clinical Speech and Hearing Practicum. (3).**
A continuation of Speech 4601.
- 4631. Audiometric Instrumentation. (3).**
A detailed study of the special problems of audiometric construction, instrumentation and methods of evaluating equipment. Special attention will be given to the purposes of audiometers, hearing aids, and testing rooms in audiometric instrumentation. PREREQUISITE: Speech 2631.
- 4632. Advanced Audiology. (3).**
A thorough study of clinical tests in audiology which include pre- and post-operative techniques, electrodermal audiometry, electro-encephalographic audiometry, and automatic audiometry. Special attention will also be given to neurologic implications in audiology and to the theory and testing in advanced audiological evaluation. PREREQUISITE: Speech 2631.

4671. Speech Pathology (3).

Steps involved in the differential diagnosis of speech disorders, establishing etiology, and planning a corrective program. Observation of diagnostic sessions in the Memphis Speech and Hearing Center. The contributions of surgery, medicine, psychology, and other related disciplines. PREREQUISITES: Speech 2611, 2621, 2631.

SPEECH EDUCATION**2911. Speech for the Elementary Classroom Teacher. (3).**

A course designed to improve the speech of teachers. Emphasis is on voice and diction, classroom speaking, and oral interpretation of literature.

4921. Play Production for Secondary Schools. (3). (492)

A survey of the problems of the play director in high school. The course considers: choosing the play, casting, directing, technical aspects of production; then relates these items to the student, the school, and the community.

4922. Directing the Forensics Program. (3). (493)

Designed for the teacher charged with the responsibility of developing and directing interscholastic or intercollegiate competitive speech programs; the study of the historical background for such programs, organizing techniques, recruiting, tournament direction, and other related concerns.

GRADUATE COURSES IN SPEECH AND DRAMA

For course descriptions and further details of the graduate program, see the Bulletin of the Graduate School.

6361. History and Criticism of British Public Address. (3).**6362. History and Criticism of American Public Address. (3).****6363. The Greek Tradition in Rhetoric and Oratory. (3).****6364. Modern Rhetorical Theory: 1700 to the Present. (3).****6371. Speech Criticism. (3). (G-435)****6421. Interpretation of Poetry. (3).****6431. Interpretation of Prose. (3).****6551. Theatre History. (3).****6571. Playwriting. (3).****6581. Dramatic Theory and Criticism. (3).****6601. Clinical Speech and Hearing Practicum. (3). (G-462)****6602. Clinical Speech and Hearing Practicum. (3).****6631. Audiometric Instrumentation. (3).****6632. Advanced Audiology. (3).****6671. Speech Pathology. (3). (G-461)****6841. Television Production III. (3). (G-481)****6871. Television Management and Programming. (3). (G-482)****6921. Play Production for Secondary Schools. (3). (G-492)****6922. Directing the Forensics Program. (3). (G-493)**

DEGREES CONFERRED IN 1964

**FIRST CONVOCATION
OF THE FIFTY-SECOND COMMENCEMENT
FEBRUARY 1, 1964**

THE SCHOOL OF ARTS AND SCIENCES

BACHELOR OF ARTS

Preston Merrell Apperson	*Martha Kate Mahaffey
Sarah Elizabeth Forrester	Arthur Hessel Prince
Benjamin Eugene Keller	*Janet Ann Schulz
**Susan Louise Koch	Doris May Wiseman

BACHELOR OF FINE ARTS

Betty Baker Madden	James Gordon Hartley
--------------------	----------------------

BACHELOR OF MUSIC

Harry L. Booth	Dale Evert Ferguson
----------------	---------------------

BACHELOR OF SCIENCE

Ralph Benjamin Adelman	Charles Louis Cousins
Donald Clifford Autry	Nancy Katherine Cross
Robert Louis Biddle	John Eugene Cunningham
Edward Thomas Brewster	*Henry Spence Dupree, Jr.
Elda Jean Cross Brockway	Charles Stewart Parnell
LoLann Wamser Brown	Dwyer III
Shelby Glenn Bruton	Wallace Terry Easley
Kenneth Jerome Burns	Martin Benton Eggensperger
Sara Ann M. Capps	Elaine Kathryn French
David Anthony Casinelli	Janice Diane Frizzell
Rebecca DeArmond	James L. Fulk
Christenberry	Earl E. Garner
William Thomas Clayton	John McGavock Grider III
Mario Cohen	F. David Haney
Emily Cohn	*Elizabeth A. Bradley Hardesty
**Joy Slaughter Coleman	Martha Karen Haugen

*Cum Laude

**Magna Cum Laude

Raymond Hawkins, Jr.
 John William Horton
 *Harold N. Hurst
 John Sanford Lang
 *Bette Lois Latta
 *Dorothy Davis Long
 Alvin Bernard Makowsky
 Richard Vincent Mashburn
 Oscar William May
 Gail Raye McClain
 Mary Frances McCulley
 Francis Eugene McKnight
 Charles O. McPherson
 Audrey Hinsley McRae
 Clyde Edwin Middleton
 Lawrence Peter Migliara
 Patricia Dianne Mills
 James Patrick Nichol
 John Davidson Pharr
 Sylvia Carole Pugh

Linn Ellen Ramsey
 Norma Jane Davidson Reagor
 Jerry Leo Robbins
 *John Franklin Robertson, Jr.
 **Moina Louise Stalcup Schmidt
 Dennis Alan Tatum
 Frances Kathryn Theos
 Sarah E. Lindsey Thompson
 Martha Duke Tuggle
 Alice Cecyle Turner
 Elaine Robin Volozin
 Richard Carlton Waldon
 Frederick E. Walker
 Karen Lee Wallace
 Sandra Lucille Wallis
 Holly Godwin Webb
 James Harold White, Jr.
 Aubra Roy Wrather
 John Clifton Young

THE SCHOOL OF BUSINESS ADMINISTRATION

BACHELOR OF BUSINESS ADMINISTRATION

James Williford Adams, Jr.
 Alford William Allred, Jr.
 William Arthur Baker
 John Edward Barger
 Joseph Paul Barnes, Jr.
 *Beverly Jean Brown
 Fleming Lindsey Chiles, Jr.
 James Fredrick Deniston
 Charles Judson Emerick
 David Hart Estile
 Bobby Lee Gaither
 Thomas Wayne Greer
 E. Joanne Harrell
 *William Joseph Hollis
 Henry Korb Hoyt
 J. Wayne Johnson
 Robert L. Johnston

Alva William Jones
 Edwin Ewing Keith, Jr.
 Richard Lee LaCroix
 Macon Webb Lowe
 Harold Irving Mansfield III
 Robert Monroe Martin
 W. Don Martin
 Danny Woodrow McAdams
 Henry Howard McBride, Jr.
 **Francis Gregory McEnaney
 James Thomas Morgan
 Roy John Patterson
 Barbara Jean Peterson
 Lawrence William Rathheim
 James Daniel Redheffer
 Thomas Franklin Sawyer, Jr.
 Murray Carl Shelton

*Cum Laude

**Magna Cum Laude

Kenneth Byron Smith
 Richard Towny Smith
 John Ray Southerland
 Thomas Edward Spraggins
 Brenda Ruth Stiles
 Richard David Stovall
 Tom Roger Taveggia
 David Alfred Todd, Jr.
 Adrian Earl Treadway

Glynn Franklin Turner
 Oscar Gordon Van Hooser
 Lanny Steve Vaughn
 James Colvin Vines, Jr.
 George Albert Wallace
 Jimmy Neal Waller
 Robert Lafayette Williams
 Allen Bryan Wood

THE SCHOOL OF EDUCATION

BACHELOR OF SCIENCE

Merilyn Jean Abernathy
 Linda Douglas Arnold
 Nancy Jo Ayers
 Anne McCaslin Blackmon
 Carolyn Azbill Blakney
 Barbara Scott Borum
 Lucille B. Wilson Brown
 Glenna Carol Cox
 Barbara Jane Droke
 Nancy Diane Epstein
 Gladys Hall Fakes
 Michael Wayne Finger
 Barbara R. Fulk
 Nancy Carolyn Grant
 Wanda Louise Grey
 Mary Frances Griffith
 *Connie Stewart Hale
 Frances Edward Harman
 Phyllis Ann Harris
 Marye Lee Harrison
 *Edward Everett Hayes, Jr.
 Emma Lucy Herring
 *Reba Stone Hudson
 James Edward Ingold
 June Mitchell Ingram
 Carolyn L. Jordan
 Martha W. Keith
 Mary Taylor Kelly

Patricia Lee Knight
 Ann Marie Liberto
 Linda Anita Long
 Diane Louise Van Zandt Lowe
 Albert Leonard Luthe
 *Elfredda Bright Mann
 Hermena McPherson Matheny
 Mildred Reams Musgrave
 Mary Ruth Plunk
 Delores Prince
 Kay Carol Puddephatt
 Shirley Schafer Ray
 Sue Landrum Rother
 Joseph Dexter Sharpe
 James Michael Simmons
 Helen Grey Spencer
 Sandra Fay Stringer
 Karen Gail Swift
 Dewey Nelson Swims
 Sharon Lindsay Tanner
 Leona Amick Thweatt
 Azalea Pickens Trumble
 Martha Sherman Underwood
 Patricia Lee Wack
 Martha Rebecca Wadsworth
 Clyde J. Watkins
 Malcolm Blake Williams
 Esther Reva Wolff

*Cum Laude

THE DEPARTMENT OF INDUSTRIAL ARTS

BACHELOR OF SCIENCE

James Daron Addington	Charles William Ingle
Michael Wayne Avent	Francis Milton Koffman
*Donald Scott Clements	Glenn Leroy Leddy
Ronnie Rosamond Crook	Edward B. McBroom, Jr.

THE GRADUATE SCHOOL

MASTER OF ARTS

Clyde E. Barham B.S., 1950, University of Tennessee	Mina M. H. Garrison B.A., 1954, University of Illinois
Morris Lee Busby B.S., 1951, Delta State College	Billie Cornell Grantham B.A., 1955, Union University
Mollie L. J. Carter B.A., 1944, LeMoyne College	Ronnie R. Green B.S., 1957, Memphis State University
Edith T. Chapin B.A., 1943, Winthrop College	Robert T. Greubel B.S., 1961, Memphis State University
Frank F. Chapman B.S., 1950, Memphis State University	John Hester B.S., 1956, Delta State College
Marion L. S. Cobb B.S., 1950, Memphis State University	Imogene Usher Hill B.A., 1936, Lane College
Robert Earl Coolidge B.S., 1954, Memphis State University	W. D. Hillin B.A., 1960, Harding College
William Ralph Durham B.S., 1963, Memphis State University	James R. Horner B.S., 1961, Memphis State University
Joyce Shanklin Finch B.S., 1959, Memphis State University	William Glenn Hoyt B.S., 1962, Memphis State University
Betty Glover Flowers B.A., 1959, Columbia College	Toy Lee Jackson B.S., 1954, Bethel College
Melvin Ford B.S., 1955, Delta State College	Frances C. Kauffman B.A., 1939, Brenau College
*Cum Laude	McGlade Ladd B.S., 1960, University of Tennessee, Martin Branch

James M. Lampley B.S., 1963, Lambuth College	Rose Coleman Rumble B.M.E., 1950, Florida State University
Billy P. Livingston B.S.E., 1961, Henderson State College	Melbina Saliba B.S., 1950, Memphis State University
Harold Wayne McKee B.S., 1958, Memphis State University	Amie L. Smelko B.S., 1949, University of Chicago
Harold B. Martin B.A., 1955, Memphis State University	Ruby D. B. Spight B.S., 1949, LeMoyne College
Albert Miller B.S., 1948, Tennessee A & I State University	Lachree Ward Stevenson B.S., 1960, Lane College
O'Ferrell Valentine Nelson B.S., 1949, Tennessee A & I State University	Evelyn M. J. Stiegler B.S., 1938, Memphis State University
Ida White D. Owen B.S., 1960, Memphis State University	Charles A. Sueing B.S., 1949, Tennessee A & I College
Milton W. Phillips, Jr. B.S., 1950, Memphis State University	C. Leo Symmank B.A., 1955, Concordia Seminary
Gretchen Mayo Reed B.S., 1945, University of Tennessee	Kenneth Denney Thomas B.S., 1959, Memphis State University
Coy Edwin Reese B.S., 1959, Henderson State College	Clara T. Thompson B.A., 1929, Arkansas State College
Morgan Richardson B.S., 1955, Harding College	William W. Watkins B.S., 1962, Memphis State University
Robert Kelly Roney B.A., 1957, Duke University	Joyce Brown Weddington B.S., 1962, LeMoyne College

DEPARTMENT OF AIR SCIENCE

AFROTC DETACHMENT NR 785

CANDIDATES FOR AIR FORCE COMMISSIONS

John Eugene Cunningham
John William Horton

Jerry Leo Robbins

**SECOND CONVOCATION
OF THE FIFTY-SECOND COMMENCEMENT
MAY 30, 1964**

THE SCHOOL OF ARTS AND SCIENCES

BACHELOR OF ARTS

Richard L. Blackburn	Tomyris Heffington
Melanie Irene Blanton	Robert Carlton Irby
Charles Edward Boyanton	*Linda Joyner Jones
Lisa Johanna Buchner	Diane Kellett
**Carol Ann Caldwell	Robert Wiley King
William Carl Cannon, Jr.	Martha Kathryn Mims
Mary Jo Carroll	Linda Lou Palmer
**Gloria Jean Dotson	**Anniece Tarver Ross
**Sandra Grace Dudley	Eleanor Sharon Solomito
Diane Fellows	Hortense Jeanette Spillers
Warren Lynn Foster	*Sharon Swepston Taylor
**Norma W. Gaskill	John N. Vaughan
**Zack Meaders Guess	Patricia Louise Vincent
*Mary Ann Williams Hardison	Marilyn Anne Winn
*Barbara Anne Harmer	Thomas Edward Zurhorst
*Carole Anne Hays	

BACHELOR OF FINE ARTS

Linda Marlene Boyd	Marion Shelly Price
Martha Sue Freels	Rochelle Virginia Randlett
John Peter Leshefka	Joyce DeLane Tidwell
*Clarence William Moody, Jr.	Carole Luise Weir

BACHELOR OF MUSIC

Gemia Ann George	*Sue Claire Holloway
Danny Duane Goodwin	Sandra Diane Williams LaCroix

BACHELOR OF SCIENCE

James Lonnie Alexander	*Patsy Ruth Moore Barber
**Donald Murray Austin	Gene A. Barlow
Richard Douglas Averitt III	Martha Jane Barnes
*Cum Laude	
**Magna Cum Laude	

- *Robert Edward Bernstein
- Gerald Thomas Bird
- Andrew Bruce Boles, Jr.
- James Fred Bowers, Jr.
- *Doris Godwin Boyd
- Jacqueline Anne Briggs
- Dorothy Claire Butts
- Helen Louise Carlson
- Celia Anne Carter
- Ekillis Momon Chandler, Jr.
- Allen Bruce Childress, Jr.
- *Irene Sue Clark
- Bonnie Speight Climer
- #Billie Wayne Cofer
- *David Sibley Cox
- John Thomas Cox
- Leslie Frank Crocker
- Marmaud Jo Cummins
- Carolyn Ann Lawler DeShazo
- Sam H. Dino
- #Harlan J. Drewry
- Charles Winston Eavenson
- Edward Yemons Embree
- *Wallace Abner Embry
- David Finley
- *Jane Eastwood Fisher
- Faye Diane Fletcher
- Barton L. Fruhman
- Robert Harold Gaskill
- Fannie Mary Gillespie
- Gordon R. Glass
- Allen William Goodfriend
- James Thomas Goodwin
- William Lamar Goodwin
- James Edward Greene, Jr.
- Rebecca Lee Hale
- *David Brown Hankins
- Patricia Ann Hayes
- *Janelle Hearington
- *Timothy Wade Hellen
- Charlotte Ann Herman
- *Cum Laude
- **Magna Cum Laude
- #To be commissioned a Second Lieutenant in the United States Air Force immediately following the conferring of his degree
- Barbara Jean Hill
- Robert Allen Holder
- Jack Lane House
- Carol Ann Howell
- Sophie Joyce Huie
- Charles Prentiss Ingram
- Diane Carey Jetton
- Andrew Finley Johnson
- Patricia Kay Joyner
- James George Karas
- **Vera Camille Key
- James Allen Lamb
- John Markin Larson, Jr.
- Glenn Bruce Lautzenhisler, Jr.
- Patrick Boyd Lawless
- Charles Edward Leverette
- Ted Pilant Lewis
- Mary Whittington Little
- Nancy Lazenby Mattox
- Stokes Dandridge McCleary, Jr.
- Austin Joseph McDermott III
- Daniel McGee, Jr.
- Paul Irvin Mendelson
- **Eva May Miller
- Everett Dewayne Miller
- Treva Jane Milliken
- *George W. Mitchell III
- Jerry Edward Mitchell
- Bobby White Montgomery
- Robert Edward Montgomery
- Tony Johnson Montgomery
- Ronnie Edward Moore
- Ronald Key Morgan
- Burton Chevis Newman
- Beverly Ray Norment
- Donald Franklin Norris
- *George Barinds O'Haver, Jr.
- Charles Olsen
- **Jane Frances O'Neil
- Patsy Ray Orr
- *Mary Sue Padgett

Paul Nesmith Pettit, Jr.	Suzanne Michau Smith
Winnie Agnes Pitts	William Eleck Smith
Fred Ernest Potts III	*Winifred Ann Solon
Mabrin Parker Powell	Norma McKinley Spaulding
Homer Leo Queen	Wyatt A. Stewart III
Dennis Wayne Raines	Charles Donald Sullivan
Wilber Shelby Rainey, Jr.	David Carroll Sullivan
Frances Elizabeth Ramsey	William E. Terrell
Emmy Louise Rea	William Thomas Thornton
Kay Kimery Reynolds	Ileda Craft Tilton
**Linda Diane Ross	#Alford Paul Tribble
Myrl David Sallee	*Charles David Van Eaton
Nancy White Seratt	Peggy Jean Walker
John Shanks	Benjiman Daniel Webb
Dolores Ann Shelton	Dennis I. Weiss
John Richard Simpson	Bendell Blaine Wilkes
Eddie G. Sisco	Donald Wayne Wilkes
Sandra Brooks Sleeker	Arthur Clifton Williams, Jr.
# Donald Winn Smith	Sandra Camille Witt
# George Arnold Smith, Jr.	John Clay Wright, Sr.
Peggy Elizabeth Smith	Wynne Agnew Wright

THE SCHOOL OF BUSINESS ADMINISTRATION

BACHELOR OF BUSINESS ADMINISTRATION

Roger Leo Adams, Sr.	Michael Keenan Ehrlicher
Jack Franklin Alexander	*Patsy R. Flowers
Betty Lou Asbridge	Myrtle Joanne Fowler
*Janice Louise Atkins	James Hugh Freeman
Kenneth Riley Bradley	#Edwin Robert Ganoung
*John Thomas Cain	Thomas Monroe George
Billy Ray Chism	Eugene Peter Giannini
Carolyn Jean Coleman	*Fay Beth Gray
Karin Lea Cook	#Armond Stephen Groves II
# Kenneth Loy Crook	# William Murrell Guy
Franklin Delano Crowe	Edward Henry Halbert
*Walter Lee Davis, Jr.	Robert Henry Hancock
Nathan James Dearing	James Otis Hastings, Jr.
Peggy Vance Dickson	William Eaton Haynes, Jr.
Charles King Easterwood	Albert DeWitt Hollingsworth, Jr.

*Cum Laude

**Magna Cum Laude

To be commissioned a Second Lieutenant in the United States Air Force immediately following the conferring of his degree

Joseph Edward Hough
 Harvey Leon Jones
 Nina Ellen Jones
 Linda Lee Jordan
 Hugh Lawson Keenan
 Carl Turner Kirkland
 *Larry Gale Lassiter
 Mildred Brown Long
 Thomas Owen Maguire
 Patrick Lafont Maher, Jr.
 Robert Sidney Mantel
 Judy Nobles Martin
 Larry Thomas McBride
 Betty Jane McCoy
 Willie Earl McKee
 Frederick Woodfall Nash II
 Cornelius Moore Nevill, Jr.
 Sondra Lynn Noffel

Clyde Warren Nunn
 William Earl Pendergrast
 James Randall Potts
 Richard G. Rogers
 Lynn Hugh Sanders
 Danny Ray Scott
 Madge Estelle Sheesley
 #Richard Terry Singleton
 Richard Wayne Sprouse
 Graham Morton Stuckey
 Dawsie Carolyn Turner
 Noell Priest Vawter, Jr.
 Jan Patrick Verhage
 John Thomas Vincent, Jr.
 Billy Ray Webb
 John Philip Wayman
 Louis Stanley Wetmore

THE SCHOOL OF EDUCATION

BACHELOR OF SCIENCE

*Edna Sue Todd Ables
 Franklin Ferdinand Acree
 Dorothy Purnell Archer
 Tennie Zue Armour
 Judy Carol Arnhart
 Joanne Theresa Baker
 Linda Ruth Baker
 Grover C. Blankenship, Jr.
 James Franklin Boone
 Zana Ellen Anderson Boyanton
 Richard Alexander Braswell
 Barbara Annette Britton
 Mary Elizabeth Brock
 Elizabeth Boone Brooks
 Edna Chatham Bruch
 Johnnie Etoy Bryant
 Martha Ellen Burke
 Rita Ann Burks
 Donna Kay Byrd

Joan Kent Clement
 Connie Ruth Cochran
 *Virginia Rose Cox
 Vicky Laney Davis
 Joyce Schwam Dillard
 Elizabeth Jean Dillon
 Connie Marie Dominion
 Carol Drake
 Melda Lynne Easley
 Jerry McNeely Ellis
 *Mary Carla Essary
 Kathleen Lynn Ferguson
 Emily Field
 Jerry Wayne Finch
 George Antone Frego, Jr.
 Mary Lou Gaillard
 Mattie Stack George
 *Yolanda Frederick Glover
 Juanita Hamilton Gray

*Cum Laude

#To be commissioned a Second Lieutenant in the United States Air Force immediately following the conferring of his degree

- *Nancy E. Simmons Gray
 Stephen Fredrick Guarr
 Martha Jane Hale
 V. Dale Osborne Halford
 Dorothy Gilmore Hardin
 Don Hamil Harrison
 James Lewis Hartmann
 Naomi Boone Hayslip
 Carolyn Cecilia Hill
 Philip Wayne Hollar
 Mary Charlotte Holmes
 Judy Gay Hopper
 James Arthur Horton
 Mary Sue Swaim Hughes
 Sara Terry Hyman
 Martha Mae Jackson
 *Sarah James
 Don Frederick Jenkins
 Mary Katherine Jennings
 Diana Rose Jerden
 Bobby Ritchie Johnson
 Linda La Nell Johnson
 Sara Bratton Johnson
 Barbara Lynn Keathley
 *Joy Veronica King
 Carole Anne Langer
 Margaret Lane Lewis
 Donna Scott Locke
 Dorothy G. L. Long
 Evelyn Hanna Maharrey
 Floyd Eugene Maharrey
 Suzanne Mallicote
 **Maxine Mayo
 *Ella Rene Mills
 Alicia Govantes Mira
 John Frank Montgomery
 Gerald Paul Morrow
 Georgia Frances Moss
 *Virginia Wall Mothershed
 Bobby Jean Mullins
 Mary L. Nall
- Edwin S. Necaise
 Roy Anthony Norbe
 William Stuart Odle
 Marjo Ree Overton
 Patricia Anne Pace
 Ruth Ellen Posey
 # William Ray Pugh
 Mary Dianne Ray
 Gayle Janean Robertson
 Terry Joe Robins
 *Carol Ann Roy
 Cynthia Sue Rudder
 Betty Manaune Russell
 Sandra Dell Sandridge
 Kathleen Louise Schultze
 Linda Page Scott
 Martha Sue Shannon
 Denese Ann Shumaker
 Charlotte Louise Sims
 Judith Ann Sinclair
 Janet Evans Sisson
 Brooksie Peters Smith
 Sylvia Kay Sparkes
 Martha Jane Spencer
 Martha Ann Thompson
 Sandra Lee Tiller
 William Larry Tubb
 Gloria Evelyn Tyner
 James Edward Waldron
 Frances Louise Walker
 Winston Timothy Weaver
 Grady Fay Weston
 **Pamela Wheeler
 Sandra Henson Whitlock
 Mary Lee Wible
 Carolyn Boudreaux Wilkinson
 Aurelia V. Williams
 Lolita Blanche Williams
 Sharon Annette Williams
 Virginia Joyce Williams
 August Carl Young, Jr.

*Cum Laude

**Magna Cum Laude

To be commissioned a Second Lieutenant in the United States Air Force immediately following the conferring of his degree

THE DEPARTMENT OF INDUSTRIAL ARTS

BACHELOR OF SCIENCE

Charles Wayne Alexander
 *Robert Edward Gelinas
 *John William Luther
 Allan Cale McAdams
 Charles Edwin Owens

James Jerry Pierce
 Richard John Saccoccia
 William Cosby Scott
 Wallace Elbert Sexton
 #Harris E. Williams

THE GRADUATE SCHOOL

MASTER OF ARTS

Vivian Onita Adams
 B.S., 1962, Memphis State
 University
 John Murray Armstrong
 B.S., 1961, University of
 Tennessee
 John Paul Atkins
 B.S., 1961, Memphis State
 University
 Janis Knox Boyd
 B.A., 1960, Baylor University
 Robert Charles Brown
 B.A., 1963, Memphis State
 University
 Josie Nelson Cobb
 B.A., 1943, LeMoyne College
 Eugenia Colbert
 B.A., 1949, College of
 Saint Teresa
 Brenda Carole Cox
 B.B.A., 1962, Memphis State
 University
 Dwight Lamar Crane
 B.S., 1962, Memphis State
 University

Mary Jo Cannon Crenshaw
 B.S., 1951, Mississippi College
 Milton Bludworth Davis
 B.S., 1951, University of Texas
 Gladys Eugenia Garland
 B.S., 1962, Memphis State
 University
 Willis Bradford Henderson
 B.S., 1963, Memphis State
 University
 Raymond Carl Horn
 B.A., 1959, Mississippi State
 College
 Donald Vertna Jackson
 B.S., 1949, LeMoyne College
 James G. Johns
 B.A., 1963, Lambuth College
 Bobby J. Keough
 B.S., 1957, Memphis State
 University
 Anne Trezevant McKinney
 B.A., 1962, Northwestern
 University
 Dorothy Bowen McMaster
 B.S., 1962, Memphis State
 University

*Cum Laude

#To be commissioned a Second Lieutenant in the United States Air Force
 immediately following the conferring of his degree

Gloria Dean Macklin B.S., 1960, LeMoyne College	William W. Stanfield B.S., 1960, Memphis State University
Ernest Gordon Maples, Jr. B.A., 1963, Southwestern at Memphis	Margot Stern B.A., 1963, University of Illinois
Marilynn Jeannette Mayhall B.S., 1954, University of Tennessee	Dorothy Grissom Thomas B.S., 1959, Memphis State University
Betty Jackson Morson B.S., 1956, University of Tennessee Medical Units	Cleland Dillard Tutor B.S., 1963, Memphis State University
Marty Oliphant Nichols B.S., 1962, Memphis State University	Martha Annette Vincent B.S., 1959, Memphis State University
Cleveland D. Orr B.S., 1953, Memphis State University	Edith Beason Waites B.S., 1960, Lamar State College of Technology
Benita Kay Dunagan Pafford B.S., 1961, Union University	Miriam Weiss B.A., 1926, University of Wisconsin
Charles Gaines Pool B.A., 1963, Hendrix College	Paul L. Wertz B.S., 1947, Northwestern University
Theodore Roosevelt Prater B.S., 1963, Memphis State University	Amelia Lucille Williams B.S., 1960, Rust College
Janet Gehring Robbins B.S., 1962, William and Mary College	Frank Arthur Williams B.S., 1942, Tennessee A&I State University
George L. Robinson B.S., 1950, LeMoyne College	Ella Waynick Woolfolk B.A., 1937, Lambuth College
C. Juanita Segneri B.S., 1947, Murray State Teachers College	

MASTER OF BUSINESS ADMINISTRATION

Edward E. Chester B.B.A., 1962, Memphis State University	Donald G. Freeman B.S., 1958, Arkansas State College
Gerald L. Crawford B.S., 1961, Delta State College	Dwight J. Garrison B.S., 1950, University of Illinois

Winford H. Guin
B.S., 1950, Mississippi State
College

Kenneth B. Phillips
B.S., 1956, Memphis State
University

John Joseph Pepin
B.B.A., 1962, Memphis State
University

James Homer Taylor
B.B.A., 1961, Memphis State
University

MASTER OF SCIENCE IN TEACHING

Isaac Wayne Chatham
B.A., M.A., 1958, 1959,
Memphis State University

Charles Thomas Irvine
B.S., 1955, Memphis State
University

William Joseph Dennie
B.A., 1958, Lambuth College

Glen Alfred Parker
B.S., 1956, Mississippi State
University

MASTER OF SCIENCE

Neil Austin Miller
B.S., 1959, Michigan State University

THE SCHOOL OF LAW

BACHELOR OF LAWS

Earl Ronald Hendry

Thomas Floyd Graves

Drue Dunlap Birmingham, Jr.

THIRD CONVOCATION OF THE FIFTY-SECOND COMMENCEMENT AUGUST 22, 1964

DEGREE CANDIDATES THE SCHOOL OF ARTS AND SCIENCES

BACHELOR OF ARTS

Arthur Jackson Baker
Vicky Lynn Brown
Dee Anna Dotson
Gayle Madge Finleyson
Patricia June Hall
Sherron Bennett Hathcock

*Leslie Brooks Hill
Wylie Francis Jones
Charlotte Turk Phillips
*Ann Taylor Rand
Carol Ann Schwill
Michael Eugene Wood

*Cum Laude

BACHELOR OF FINE ARTS

Karene Camille Jenkins

Evelyn Mae Partain

BACHELOR OF SCIENCE

Margaret Childs Anglea
 Reese Edward Austin II
 Billie Jeanne Baxter
 Jane Carolyn Blackburn
 Jane Chambers Bostwick
 Jan Bradford
 Jack Leslie Brimm
 Larry Ross Britton
 Lula McPhail Buford
 Brenda Gay Burke
 Robert M. Cady
 Alfred B. Cate, Jr.
 Jerry Glyn Caudel
 John Joseph Coll
 Lester Eugene Conyers
 Kenneth Maurice Cox
 David Cyrus Crockett
 Cletus Chester Culp, Jr.
 *Lee Anthony Davidson
 William Roy DeMaree, Jr.
 Donna Lynn Duke
 Allen Bennett Duncan
 William Edward Dunivant
 Gloria Ann Ervin
 Effie M. Eubanks
 Jane Hewlett Eveland
 Douglas Eugene Gibson
 Gene Gillette
 Harold Stanley Goldman
 Larry Franklin Griffin
 John Charles Henderson
 **Virgie Lee Herndon
 Ann LaNelle Herron
 Raymond Lawrence Herzog, Jr.
 William P. Hewitt
 Sharon Hindin
 Walter Michael Holmes

***Magna Cum Laude
 *Cum Laude

Mary Rebecca Humber
 Ronald Reed Jackson
 Carolyn Wilkes James
 Charles Columbus Johnson II
 *Sylvia S. Johnson
 George Matthew Jones
 Travis L. Jones
 Alisa Sagalovitch Kamieniecki
 June Kantor
 *Kay Elaine Kelley
 William Ernest King
 David Lee Lambert
 George M. Lapides
 *Rachel Elaine Lawson
 Brenda Kay Little
 Steven Edward Little
 Earl Lipscomb Martin, Jr.
 Judith M. McAuley
 Donna Peace McBryde
 Patrick Charles Miller
 Donna Lee Morris
 Barbara Jean Mull
 Richard Dean Mullennax
 Earl Roy Mullinaux
 Judith Grugett Murray
 Harold Hutson Nobles
 Charles Maurice Olds
 Edward Bennett Orio
 Audrey Earl Osborn
 Floyd Peete, Jr.
 *Elizabeth Kay Perryman
 Albert Lee Pittman
 *Barbra Capooth Prince
 James Wilbur Pruitt, Jr.
 Robbie Norene Pulliam
 Joe Fred Purdy, Jr.
 Robert Hardee Quarles

*Ann Taylor Ramey	Alex L. Smoot
Earle Richard	Wayne Edmond Stafford
Joel Edward Robinson	Elvis Hoite Stone
Phillip Edward Rouss, Jr.	Richard Crafton Swiggart
James Peter Ruyl	James Edgar Thomas
William Jackson Rylee	Charles Clinton Thompson II
Betsy Sanders	Fred Dalton Thompson
Robert Francis Scanland	Barbara Carol Tochen
Winifred Richards Schmidt	Reuben Lee Trussell
Gunther Joseph Schnabl	Curtis Dudley Walton
Cranford LaVern Scott	Basil Brazil West
Bernice G. Siler	Donald Howard West
Charlotte Sepp Smith	Sue Cottrell Williams
David Ogden Smith	Sara Jean Garrott Wilson
Vincent D. Smith	Ruble Wendell Wyatt

THE SCHOOL OF BUSINESS ADMINISTRATION

BACHELOR OF BUSINESS ADMINISTRATION

Charles Weaver Allen	James Perry Gray
*Frances Rose Alpe	Clay Dunavant Gresham
Jerry Wayne Atwood	Preston Gene Haag
William F. Bell III	Percy James Henry
Charlotte Corriene Beumel	William Morris Hezel
Dorothy Kay Bourne	Joe E. Hughes, Jr.
Thomas Lee Bowers	Daniel Weems Jenkins
*Leslie V. Brooks, Jr.	Anne Marie Kavanaugh
James Franklin Byrd	Sally Inez Kennedy
Hendrix Franklin Chitwood, Jr.	**Lawrence Lester Knight
Eugene Conners Church	Shirley O. Lamar
Paul Halsell Cockrill, Jr.	*Rebecca Ann Lawrimore
Robert Gill Collomp	Wallace Clifton Madewell
Nichols Anthony Crisafi	Jay Kenneth Martin
Harry Gordon Crockett, Jr.	Hildred Howard Massengill
Cheryl Ann Curry	Kenneth Earl Miller
Johnny Davidson, Jr.	John Charles Mitchell
Fred Lee Davis III	*Page Monroe Newman, Jr.
Gene Austin Dobson	Walter Foster Padgett, Jr.
John Merrell Elkins	Johnny Ray Pike
*Robert Lee Etheredge	Gary Eugene Plummer
Gordon Clifford Fiala	Judith Ann Porterfield
Robert Wayman Forrest	Charles Phelan Price

*Cum Laude

**Magna Cum Laude

**Mildred Golden Pryor	Stanley Clayton Turner, Jr.
Thomas Joseph Pugh	John A. Ustick
Richard Henry Quast	Russell Gordon Vollmer
*Pamela Lee Raines	William Gary Waldrip
John Fred Robilio, Jr.	Robert Layne Warren
Benjamin Russell Schultze	Theodore Charles Watts
Sandra Joy Shaw	Berta Lane Wilkinson
Thomas Russell Smith	James Dodds Williams
Kenneth Wayne Smithart	Ronald Mark Williams
Walter Ray Steele	Robert Burke Wilson, Jr.
Ralph Ernest Tipton	

THE SCHOOL OF EDUCATION

BACHELOR OF SCIENCE

James Austin Acuff	*Margie Hale Gilliam
*Sally Anthony	*John Earl Glover
Robert Michael Armstrong	Pauline Ruth Highsmith
Karen Louise Baker	Daniel Carl Hintzman
Mary Suzanne Blair	Louise Fuller Horton
Linda Gayle Jones Boroughs	**Mary Agnes Hoyt
Rebecca Claire Bozeman	*Judith Timbs Huff
Anna Louise Brock	Mary Dee Kemp
Frances Cashion Cannon	Lela Kay Kennon
Frances Bigbie Chance	Clara Edna Ladner
Barbara Ann Clark	Patricia Moriarty Lanier
Alice Marbury Cobb	Rosemary Stewart Lawrence
Betty Gullett Coolidge	Nancy Jo Levy
**Adele Wadsworth Couch	Russell Brown Lindsey
Robert Compton Critchett	Alyce D. Long
Jo Ann Davis	**Beth Ivy Marchant Marlow
Carey Helen Dixon	Grace Marie Milburn
Willie Myrlene Dixon	Emma Jean Moore
Margaret Dunphy Donnell	Ronnie Owen Moses
Joan Riddick Earls	Dora Roushall Nevels
Linda Van Ausdall Edgerton	Evalyn Latham Nichols
Mattie Loyce Ellis	**Ida White Owens
Evelyn M. Erwin	Patti Radford Ozier
Robbie Jean Fisher	Jamie Ella Patrick
LaVerne West Fleming	Shelby Jean Pitts
*Virginia Young Fly	Janice Kay Provow
Matha Jeanne Fullerton	Inez Thomas Raines
*Cum Laude	
**Magna Cum Laude	

*Bonnie Manning Reid
 Alice Smith Sammons
 James Earl Shelly
 Miriam Ann Siegel
 Joseph Robert Sills
 Peggy Hannah Singleton
 L. B. Smith
 Thomas Flowers Smith, Jr.
 *Dennis Edward Snell
 Felicia Lucia Sorce
 Pauline Scott Stanton
 Laquita Withrow Streibich
 Barbara Boland Summars
 Sandra Kay Tatum
 *William Clevo Tatum

Barbara Kaplan Taube
 Sally McAdoo Thorn
 Lois Janet Tobias
 Carolyn Ellen Torri
 Sandra Alice Turner
 Laurence Lee Van Dyke
 Velma Jean Wallace
 Sharon Lynda Weiner
 *Harold George Weiss
 *Lola Joan Wells
 Mary Lou Wells
 Sam Douglas Wiley
 Carrie Jo Williams
 Jane Finley Witt
 Phyllis Elaine Wood

THE DEPARTMENT OF INDUSTRIAL ARTS

BACHELOR OF SCIENCE

Jerry Lee Bray
 George Douglas Brewer
 Jerry Lynn Calhoun
 Ralph Edward Ciccarelli
 William Alford Ford, Jr.

Eckbert Michael Hartung-Schuster
 Jesse Lee Lovorn, Jr.
 Robert Harris Walton
 Edward Harrison Weldon, Jr.
 Thomas Henry Welshans

THE GRADUATE SCHOOL

MASTER OF ARTS

Richard Anthony Adragna
 B.S., 1963, Memphis State University

William Ernest Bennett
 B.A., 1963, Memphis State University

Rose Mary Anderson
 B.S., 1950, Ouachita Baptist College

Joyce Ruth Bishop
 B.S., 1963, Memphis State University

Donald Eugene Barnes
 B.S., 1962, Memphis State University

Lewis Fletcher Bracy
 B.A., 1961, University of Arkansas

Sara Elnora Bennett
 B.S., 1962, Blue Mountain College

Tom Ella Adams Bratcher
 B.S., 1949, LeMoyne College

*Cum Laude

Kenneth Norman Brigham B.S., 1957, Memphis State College	Peter Frink Darrah B.S., 1962, Memphis State University
Charles Perry Brown B.S., 1958, Memphis State University	Henry C. Davis B.S., 1963, Memphis State University
Oscar O. Bruce B.A., 1961, David Lipscomb College	William C. Deason B.S., 1962, University of Florida
Cecelia Burrows B.S.E., 1948, Arkansas State Teachers College	Anthony Finley Eastman B.A., 1962, Union University
Virginia Goff Butler B.S., 1956, Bethel College	Cecil Ann Simpson Ford B.S., 1954, Memphis State College
Robert Walter Cartrett B.S., 1963, University of Tennessee, Martin Branch	Sara Ackerman Frey B.A., 1950, Denison University
Liddie Irene Clanton B.S., 1960, Memphis State University	Ruth Linnie V. Gamble B.A., 1946, Blue Mountain College
Dimple Etheridge Clark B.S., 1960, Memphis State University	David Allen Gibson B.A., 1960, Memphis State University
William M. Claytor B.A., 1963, Northeastern Missouri State Teachers College	Jeff Davis Gillenwater B.B.A., 1962, Memphis State University
Robert Winfred Click B.B.A., 1961, Memphis State University	Cora L. P. Gleese B.S., 1951, LeMoyne College
Mabel Threlkeld Colvin B.S., 1935, Memphis State College	Joyce Cooper Graflurd B.S., 1963, Memphis State University
Hazel Marie Cothran B.S., 1962, Middle Tennessee State College	Phyllis Earline Whalin Haire B.S., 1963, Memphis State University
Barbara Lynn Cummings B.S., 1959, Memphis State University	Marilyn Tucker Halfacre B.S., 1949, LeMoyne College
Helen Arleene Cutler B.S., 1958, Memphis State University	John Stephen Hamilton B.S., 1963, Memphis State University
	Alice A. Hanessian B.A., 1956, American University of Beirut, Lebanon

Sidney James Hartsfield B.S., 1941, Piedmont College	John Carrington Koeppel B.S., 1962, Memphis State University
Malcolm Hawkins B.S., 1941, University of Tennessee	Grace J. Kraft B.S., 1952, Memphis State College
Brenda Sibley Haynie B.S., 1963, Memphis State University	Lura C. Lature B.S., 1957, Memphis State College
Noble Hicks, Jr. B.A., 1948, Southwestern at Memphis	Jeanne Edens Lewis B.M., 1949, Southwestern at Memphis
Farley Morton Hill B.S., 1960, Memphis State University	Francis Lee McCray B.S., 1962, Lambuth College
Lorelle Marlin Hooper B.A. & B.S., 1943, Texas State College for Women	Joyce McGill B.S., 1961, Memphis State University
Patricia F. Horton B.S., 1956, Delta State College	Ellen F. McGowan B.S., 1960, Memphis State University
Annetta S. Lochridge Huckabee B.S., 1963, Memphis State University	Donald Edward McLeod B.A., 1958, Memphis State University
Cleophus Hudson, Jr. B.S., 1959, LeMoyne College	Frank Lewis McRae B.S., 1952, Memphis State College
Rose Collins Hudson B.A., 1962, LeMoyne College	Leigh Windsor MacQueen B.A., 1955, Southwestern at Memphis
Bettie Ruth Humphreys B.A., 1948, Mississippi State College for Women	Dorothy Trainor Meeks B.A.E., 1953, University of Mississippi
Isson H. Jackson B.S., 1957, LeMoyne College	Van Grady Melson B.A., 1963, Lambuth College
Jessie Lue Jackson B.S., 1958, Tennessee A and I University	Sarah Bond Miller B.A., 1959, Baylor University
Horace E. King B.S., 1958, LeMoyne College	Mary E. Cooper Morgan B.S., 1958, Memphis State University
Rebecca Blythe King B.A., 1962, Lambuth College	

Martha Barret Morrow B.A., 1961, Southwestern at Memphis	John Alfred Rutledge B.S., 1951, Memphis State College
Earline Johnson Nations B.S., 1936, Millsaps College	Charles Henry Ryans B.S., 1950, Tuskegee Institute
Rochester Neely, Sr. B.S., 1939, LeMoyne College	Joy Lucille Scott B.S., 1956, Memphis State College
Alma Joy Nelms B.S., 1962, Memphis State University	Gertrude Davis Scruggs B.S., 1954, Tennessee A and I University
Neal G. Newland B.A., 1962, Union University	Barbara Herndon Sharp B.S., 1961, Memphis State University
Forest Melvin Norville B.S., 1957, Memphis State College	L. Arnold Siniard B.S., 1963, Memphis State University
Jerry Phillip Nowell B.M., 1959, Union University	Harold Truman Smith B.A., 1963, Little Rock University
Teresa Simmons Owen B.S., 1963, Memphis State University	Kathryn Carey Smith B.S., 1958, Memphis State University
Henry Lee Presley B.S., 1953, Memphis State College	Emery Collins Somerset B.S., 1959, LeMoyne College
Virginia Ann Pretti B.A., 1958, Siena College	Ollie Mae Stewart B.S., 1961, LeMoyne College
Robert L. Rice B.S., 1963, Memphis State University	Russell Howard Strauss B.S., 1962, Memphis State University
Joel Roitman B.S., 1963, Memphis State University	Mary Eleanor Summers B.S., 1960, Memphis State University
Elizabeth K. Romby B.S., 1941, Tuskegee Institute	Alfred Glenn Swinny B.S., 1963, Memphis State University
Geraldine Rowland Russell B.S., 1963, Memphis State University	James Robert Swope B.S., 1963, University of Tennessee, Martin Branch
Glynn Lee Russell B.S., 1962, Memphis State University	

Wilmah A. Scott Tatom B.S., 1961, Memphis State University	Mary Ulmer B.S., 1963, Memphis State University
Nina Gates Taylor B.S., 1943, Mississippi State College for Women	Phyllis Heller Wahl A.B., 1946, Harris Teachers College
Patrick R. Taylor B.A., 1962, University of Maryland	Bobbie Wilson Walker B.S., 1951, LeMoyne College
Robert L. Todd B.A., 1960, Union University	John Clifford West B.S., 1961, East Texas State College
Barbara Annette Townsend B.B.A., 1962, Memphis State University	Willie Tillman Wheatley B.S., 1962, Lambuth College
Jimmy Douglas Townsend B.S., 1962, Memphis State University	Jack E. Willis B.S.E., 1954, Arkansas State Teachers College
Lula Charline Tucker B.S., 1955, Bethel College	Terryl Curtis Wilson B.B.A., 1960, Memphis State University
Joel Alan Turetzky B.S., 1961, University of Alabama	Thomas Eugene Yarbrough B.S., 1960, Tennessee A and I University

MASTER OF BUSINESS ADMINISTRATION

Aki Koi Berfield B.de H., 1945, M.A., 1951, University of Mexico	Donald Neil Humphries B.B.A., 1958, Memphis State University
Larry S. Combs, Jr. B.S., 1961, Christian Brothers College	Gerald Paul Kopp E.S.C., 1963, Ecole Superieure de Commerce, Dijon, France
Harvey Franklin Greer B.B.A., 1959, Memphis State University	Van Norwood Oliphant B.B.A., 1963, University of Mississippi
Melvin Ewell Greer B.B.A., 1959, Memphis State University	Sarah Linda Cox Pugh B.B.A., 1963, Memphis State University

MASTER OF SCIENCE IN TEACHING

Judy Pinson Davis B.S., 1961, George Peabody College for Teachers	Jannice Gibson Rogers B.S., 1942, University of Tennessee
Onorine B. Long A.B., 1938, Lambuth College	Harry John Stewart, Jr. B.B.A., 1950, University of Mississippi

MASTER OF SCIENCE

Harlan Dee Brown B.S., 1962, Memphis State University	Daniel Rayford Marks B.S., 1944, Memphis State College
James Herbert Gardner B.S., 1962, Arkansas A and M College	Richard Pink Owens B.S., 1962, Memphis State University
James William Howell B.S., 1963, Memphis State University	

DEPARTMENT OF AIR SCIENCE

AFROTC DETACHMENT NR 785

CANDIDATES FOR AIR FORCE COMMISSIONS

Jerry L. Calhoun	Daniel W. Jenkins
William E. Dunivant	Charles C. Johnson II
Eckbert M. Hartung-Schuster	Robert F. Scanland
Raymond L. Herzog, Jr.	Ronald M. Williams

DEAN'S LIST

FALL SEMESTER, 1963-64

- Annaratone, Frank Eugene
 *Aste, Mary Louise
 Barger, William Thomas
 *Bobbitt, Larry Albert
 Boyd, Doris Godwin
 Bradsher, Patricia Louise
 Brothers, Jacqueline Louise
 Brower, Gary Marcel
 Brown, Beverly Jean
 Buehnerkemper, Kenneth Neal
 Caldwell, Carol Ann
 Carruthers, Sally Kosloski
 Chambers, James Thomas
 Chapel, Donna Jean
 Chappell, James E.
 Clements, Buddy Jerome
 Couch, Eddie Mae Wadsworth
 Cox, Glenna Carol
 Crockett, Harry Gordon, Jr.
 Davis, Nancy Lloyd
 *Doss, Judith Sandra
 Duncan, Allen Bennett
 Everett, Marilyn McNabb
 Farmer, Lizette K. Flowers
 Fisher, Jane Eastwood
 Franklin, Sandra Hall
 *Franklin, Sydney
 Fravega, Mary Elizabeth
 Fruhman, Barton Leroy
 Gaillard, Mary Lou
 Gantt, Brianne
 Gardner, Everette Shaw
 Gardner, Sarah K. O'Hara
 Gauldin, Jane Ridens
 Gelinas, Robert Edward
 Goodwin, James Thomas
 *Guess, Zack Meaders
 Gwin, Lynda Ann
 Haire, Craig Michael
 Hale, Alice Stewart
 Hardin, Dorothy Gilmore
 *Harman, Francis Edward
 Hathorne, Sandra Jo
 Hellmann, Patricia
 *Herndon, Virgie Lee
 *Hill, Linda Archer
 Hudson, Donnie June Pogue
 Humphrey, William Merritt
 Jackson, Robert Holland
 Jaffe, Sanda Michelle
 James, Sarah Lydia Leech
 Keirns, Nancy Esther Davis
 Knight, Lawrence Lester
 *Koch, Susan Louise
- Leake, George Craig
 Leatherwood, Patricia Ann
 Long, Alyce Dykema
 *Marlow, Beth Ivy Marchant
 Massengill, Bobby Eugene
 *Matheny, Hermena McPherson
 *Mayo, Grace Maxine
 McDow, Robert Simpson
 McPheeters, Scotty
 Miers, Ann Bryan
 Miller, Eva May
 Mills, Ella Rene Talley
 Morris, Anne Darby
 Mothershed, Virginia
 Nave, Paul Michael
 Newman, Page Monroe
 *Olsen, Damaris A.
 Padgett, Mary Sue
 Parker, John Henry, Jr.
 Perkins, Mary Fay
 Plaisance, Rene Lois
 Price, Marion Shelly
 Pryor, Mildred L. Golden
 Rand, Ann E. Naylor
 Rose, Amy Elizabeth
 Ross, Linda Diane
 Sartain, Kenneth Curtis
 Schmidt, Moina L. S.
 *Schomp, William George
 Seratt, Nancy White
 Simmons, James Michael
 Singleton, Jerry Dean
 Smith, Gail Elizabeth
 Smith, Kenneth B.
 Smith, Marshal Lynn
 Smith, Penelope Irene
 Solon, Winifred Ann
 Spray, Ruby Fay
 Stanfield, Diana Jean
 Tackett, Jane Katherine
 *Talbert, Charles R.
 Tansey, Barbara Jean
 *Taylor, Ann Marie
 Thompson, Charles Spurgeon
 Voss, Margaret Ann
 Webb, Holly Godwin
 Weiss, Dennis I.
 Welch, Judy Kay
 West, Basil Brazil
 Wheeler, Dorris Elaine
 White, Robert Paul
 Wilson, Anne Marie
 Zollinger, Justine

*All grades A

DEAN'S LIST

SPRING SEMESTER, 1964

- | | |
|--------------------------------|----------------------------|
| Ables, Edna Sue Todd | *Marlow, Beth Ivy Merchant |
| Anderton, Nancy Elaine | *Mayo, Grace Maxine |
| Archer, Dorothy May Purnell | McDow, Robert Simpson |
| Aste, Mary Louise | McGee, Daniel, Jr. |
| Atkins, Truman Turnage | *Monger, Samuel III |
| Austin, Diane Rebecca | Morris, Anne Darby |
| Bivens, Patsy Marie | *Mothershed, Virginia Wall |
| Bobbitt, Lary Albert | Moultrie, Georgia Bungard |
| Bradsher, Patricia | Murphrey, Mildred Cheryl |
| Braswell, Bettye | *Nail, Helen Darling |
| Buchner, Lisa Johanna | Nave, Paul Michael |
| Buzbee, Anita Carole | Naylor, Joan Fentress |
| Byrom, Charlotte Ann | Newman, Page Monroe |
| Carruthers, Sally Kosloski | Osteen, Susan Castles |
| Carter, Robert Henry | Pell, John Lee |
| Casini, Michael Peter | Penny, Roy Wayne |
| *Chapel, Donna Jean | Perkins, Mary Fay |
| Climer, Linda Jo | Perryman, Elizabeth Kay |
| Crockett, Harry Gordon, Jr. | Phillips, William Goodlett |
| Dowd, Maxine Epps | Piccatto, Marilyn Ann |
| *Dudley, Sandra Grace | Provow, Janice Day |
| *Easley, Melda Lynne | *Rafferty, Rosalyn Ann |
| Ellis, Jerry McNeely | *Robbins, Kittye Delle |
| Embree, Edward Yemons | Rose, Amy Elizabeth |
| *Essary, Mary Carla | Sanders, Bette Theora |
| Fravega, Mary Elizabeth | Schwind, Charlotte |
| Geltosky, John Edward | Seratt, Nancy White |
| *Gray, Juanita Hamilton | Shannon, Martha Sue |
| Gwin, Lynda Ann | Shephard, Anne Catherine |
| Gwinn, Virginia Maude Johnson | Shumaker, Denese Ann |
| Hellman, Patricia Ann | Skaller, Joy Rosanne |
| Hight, James Alex | Smith, Gail Elizabeth |
| Hill, Leslie Brooks | *Smith, William Eleck |
| *Hill, Linda Archer | *Spencer, Julia Rose |
| Hoffman, Virginia Clowes | Spray, Ruby Fay |
| Hollar, Phillip Wayne | Stanfield, Diana Jean |
| Holloway, Sue Claire | Tansey, Barbara Jean |
| Howard, Beverly Dee | Taras, Loretta H. Cotros |
| *Hoyle, Mary Wallace | Thillen, Marie Clare |
| Hughes, Mary Swaim | Tiller, Sandra Lee |
| *Jaffe, Sandra Michelle | Vaughan, Sharon Ann |
| Johnson, Sylvia Sue | Watkins, Glenda Kay Smith |
| Kelley, Kay Elayne | Weiss, Harold George |
| Key, Susannah V. Compers | Welch, Judy Kay |
| Key, Vera Camille | Wells, Lola Joan Moore |
| Knight, Lawrence Lester | Wener, Sidney David |
| Koeller, Kay Lynn | Wheeler, Pamela |
| Lanier, Patricia Joy Moriarty | White, Robert Paul |
| Langer, Carole Anne | Williams, Sharon Annette |
| Maglioli, Therese Gail Fondren | *Williams, Virginia Joyce |
| Mahal, Keith Allen | |

*All grades A

HONOR ROLL

FALL SEMESTER, 1963-64

	<i>Honor Points</i>		<i>Honor Points</i>
Marlow, Beth Ivy Merchant	210	Hardin, Dorothy Gilmore	150
Mayo, Grace Maxine	210	Harman, Francis Edward	150
Gelinas, Robert Edward	195	Haun, Katherine C. Alden	150
Hale, Alice Stewart	195	Hudson, Donnie J. Poague	150
Gauldin, Jane Ridens	185	Jaffe, Sandra Michelle	150
Crockett, Harry Gordon, Jr.	180	Jones, Lorraine Olivia	150
Franklin, Sydne	180	Koch, Susan, Louise	150
Herndon, Virgie Lee	180	Leatherwood, Patricia Ann	150
Pryor, Mildred L. Golden	180	Matheny, Hermena McPherson..	150
Rand, Ann E. Naylor	180	McPheeters, Scotty	150
Taylor, Ann Marie	180	Mills, Ella Rene Talley	150
Brown, Beverly Jean	175	Newman, Page Monroe	150
Chambers, James Thomas	175	Pullen, Frances Kaye	150
King, William Ernest	175	Smith, Kenneth Byron	150
Gantt, Briane	170	Smith, Penelope Irene	150
Long, Alyce Dykema	170	Talbert, Charles Robert	150
Olsen, Damaris Annette	170	Thompson, Charles Spurgeon ..	150
Schomp, William George	170	Brothers, Jacqueline Louise ..	145
Barger, William Thomas	165	Gardner, Everette Shaw	145
Chapel, Donna Jean	165	Haire, Craig Michael	145
Gardner, Sarah K. O'Hara	165	McDow, Robert Simpson	145
Goodwin, James Thomas	165	Osteen, Susan Castles	145
Hoyt, Mary Wallace	165	Plaisance, Rene Lois	145
Kloepper, Raymond Phillip	165	Ross, Linda Diane	145
Knight, Lawrence Lester	165	Sartain, Kenneth Curtis	145
Miller, Margaret Lee	165	Seratt, Nancy White	145
Morris, Anne Darby	165	Smith, Marsha Lynn	145
Robbins, Kittye Delle	165	Tansey, Barbara Jean	145
Singleton, Jerry Dean	165	Tansey, Marian Lucille	145
Walker, Frederick Eugene	165	Wilson, Anne Marie	145
Weiss, Harold George	165	Zöllinger, Justine	145
White, Robert Paul	165	Climer, Linda Jo	140
Franklin, Sandra Lee Hall.....	160	Davis, Nancy Lloyd	140
Hill, Linda Archer	160	Farmer, Lizette K. Flowers	140
Theos, Frances K. Maus.....	160	Gaillard, Mary Lou	140
Binkley, Linda Gail	155	Gwin, Lynda Ann	140
Carruthers, Sally Kosloski	155	Hathorne, Sadra Jo	140
Couch, Eddie Mae Wadsworth ..	155	Humphrey, William Merritt ..	140
Hellman, Patricia Ann	155	Jones, Alberta Faye	140
Hill, Leslie Brooks	155	McClure, Earl Stanley	140
Raifsnider, Brenda	155	Miers, Ann Bryan	140
Smith, Gail Elizabeth	155	Norton, Marcus Hall	140
Welch, Judy Kay	155	Paxenos, Katherine	140
Aste, Mary Louise	150	Reinhardt, James Douglass ..	140
Barker, Laura McShane	150	Rose, Amy Elizabeth	140
Bobbitt, Larry Albert	150	Spray, Ruby Fay	140
Bradsher, Patricia Louise	150	Tackett, Jane Katherine	140
Caldwell, Carol Ann	150	Ables, Edna Sue Todd	135
Cox, Glenna Carol	150	Arnold, Linda Douglas	135
Doss, Judith Sandra	150	Austin, Diane Rebecca	135
Geltosky, John Edward	150	Boyd, Doris Godwin	135
Golightly, Marilyn	150	Bramlett, Mildred	135
Guess, Zack Meaders	150	Burke, Brenda Gay	135

	<i>Honor Points</i>		<i>Honor Points</i>
Chappell, James Edwin	135	Winn, Sandra Frances	125
Clements, Buddy Jerome	135	Acree, Margaret E. Hill	120
Connell, James Terry	135	Allsop, Josephine Brady	120
Easley, Melda Lynne	135	Annaratone, Frank Eugene	120
Fakes, Gladys Hall	135	Archer, Dorothy May Purnell	120
Gibson, Nancy Carol	135	Buck, Katherine Lee	120
Hale, Rebecca Lee	135	Byrom, Charlotte Ann	120
Hoffman, Virginia Clowes	135	Camp, Marjorie Craig	120
Hoskins, Jane Gay	135	Cross, Nancy Katherine	120
Howard, Beverly Dee	135	Dabbs, Helen Sandra	120
Huff, Judith Timbs	135	Essary, Mary Carla	120
Hutcheson, Ann F.	135	Everett, Marilyn McNabb	120
James, Sarah L. Leech	135	Fisher, Jane Eastwood	120
Long, Janice Bell	135	Fravega, Mary Elizabeth	120
Mothershed, Virginia	135	Freels, Martha Sue	120
Overall, Camille	135	Fruhman, Barton Leroy	120
Padgett, Mary Sue	135	Gilliland, Sally Beth	120
Schmidt, Moina L. Stalcup	135	Glover, Yolanda Frederick	120
Skaller, Joy Rosanne	135	Goldman, Joel Malcolm	120
Solon, Winifred Ann	135	Gray, Nancy E. Simmons	120
Swift, Karen Gail	135	Gray, Robert Lofton	120
Volozin, Elaine Robin	135	Guess, Emily Quay	120
Watts, Kathleen Inez	135	Hall, Ruth Ann	120
Weiss, Dennis I.	135	Holder, Elizabeth Alison	120
West, Basil Brazil	135	Jacobson, Lillian K. Niles	120
Wheeler, Dorris Elaine	135	Keirns, Nancy Esther Davis	120
Austin, Donald M.	130	Key, Vera Camille	120
Brewster, Edward Thomas	130	Leake, George Craig	120
Brower, Gary Marcel	130	Lowe, Diane L. Van Zandt	120
Buehnerkemper, Kenneth Neal	130	McBride, Henry H., Jr.	120
Buzbee, Anita C.	130	McEnaney, Francis Gregory	120
Cushing, Mary Lou	130	Meyers, Thomas Patterson	120
Duncan, Allen B.	130	Miller, Eva May	120
Eckstein, Edward G.	130	Miller, Franklin Reid	120
Kelley, Kay Elayne	130	O'Neil, Jane Frances	120
Long, Dorothy Davis	130	Perkins, Mary Fay	120
Nave, Paul Michael	130	Price, Marion Shelly	120
Shepard, Anne Catherine	130	Rafferty, Rosalyn Ann	120
Simmons, James Michael	130	Reid, Bonnie Sue Manning	120
Stanfield, Diana Jean	130	Schorr, Mildred Geyer	120
Thetford, Elizabeth	130	Tarver, Sharon Anniece	120
Aaron, Deanna Lorraine	125	Thomason, Sandra Earle	120
Brasher, James Martin	125	Thompson, Freddie D.	120
Braswell, Bettye Jane	125	Tiebout, Richard Arnold	120
Cowgill, Marie E. Griffith	125	Vincent, Patricia Louise	120
Crosthwait, Edward	125	Voss, Margaret Ann	120
Curtis, Lynda Carol	125	Wack, Patricia Lee	120
Downs, Betty Louise	125	Walker, Julia Ann	120
Faquin, Ava Alice	125	Watkins, Janet Gail	120
Jackson, Robert Holland	125	Webb, Holly Godwin	120
Johnson, Julie Greer	125	Wheeler, Pamela	120
Jones, Linda Joyner	125	Youngblood, Robert James	120
Massengill, Bobby Eugene	125	Anderson, Teri Lynn	115
Naylor, Joan Fentress	125	Arnold, Carolyn Beth	115
Pincus, Robert Theodore	125	Church, Dorothy Gertrude	115
Todd, David Alfred	125	Cummins, Marmaud Jo	115
Vance, Sheila Sweet	125	Davie, Steven Ames	115
Wells, Norris Eugene	125	Hamblin, Elizabeth	115
Wilkerson, John Richie	125	Harris, Minnie Florence	115

	<i>Honor Points</i>		<i>Honor Points</i>
Heffington, Mark Foy	115	Pierce, Betty Frances	115
Howard, Claudia Marie	115	Prewett, Jeri Lynn	115
Hudson, Reba Stone	115	Rudder, Cynthia Sue	115
Long, Linda Anita	115	Sirmacis, Gunta	115
Martin, Ashley Marvin	115	Thompson, Jean Young	115
Mitchell, Georgene	115	Vaughan, Sharon Ann	115
Murphrey, Mildred Cheryl	115	Vinson, Daryle Wayne	115
Parker, John H., Jr.	115	Watkins, Glenda Kay Smith	115
Pell, Sandria Lynn	115	Winhusen, Betty Mae	115

HONOR ROLL**SPRING SEMESTER, 1964**

Knight, Lawrence Lester	195	Gantt, Briane	150
Skaller, Joy Rosanne	195	Gauldin, Jane R.	150
Bivens, Patsy Marie	185	Gray, Juanita Hamilton	150
Pell, John Lee	185	Hathorne, Sandra Jo	150
Hill, Leslie Brooks	180	Hoffman, Virginia Clowes	150
Hill, Linda Archer	180	Hoyt, Mary Agnes Wallace	150
Jaffe, Sandra Michelle	180	Koeller, Kay Lynn	150
Robbins, Kittye Delle	180	Marlow, Beth Ivy Marchant	150
Carruthers, Sally Kosloski	175	Mayo, Grace Maxine	150
Geltosky, John Edward	175	McDow, Robert Simpson	150
Gwin, Lynda Ann	175	Mothershed, Virginia Wall	150
Tansey, Barbara Jean	175	Nail, Helen Dearling	150
Stanfield, Diana Jean	170	Newman, Page Monroe	150
Aste, Mary Louise	165	Northern, Michael Steven	150
Casini, Michael Peter	165	Phillips, William Goodlett III	150
Crockett, Harry Gordon Jr.	165	Provow, Janice Kay	150
Mahal, Keith Allen	165	Rafferty, Jo Ann	150
McGee, Daniel Jr.	165	Rose, Amy Elizabeth	150
McGehee, Lynda Grace	165	Sanders, Bette Theora	150
Piccatto, Marilyn Ann	165	Seratt, Nancy White	150
Weiss, Harold George	165	Smith, William Eleck	150
Chapel, Donna Jean	160	Spencer, Julia Rose Frazier	150
Jackson, John Michael	160	Thillen, Marie Clare	150
Kelley, Kay Elayne	160	Vaughan, Sharon Ann	150
Kennon, Lela Kay	160	Webb, Benjiman, Daniel	150
Monger, Samuel Arthur III	160	Wener, Sidney David	150
Rafferty, Rosalyn Ann	160	Williams, Virginia Joyce	150
Shepard, Anne Catherine	160	Downs, Betty Louise	145
White, Robert Paul	160	Hamblin, Elizabeth Burl	145
Atkins, Truman Turnage	155	Hancock, Janet Lee	145
Chambers, James Thomas	155	Lendermon, Bonnie Rae	145
Hellman, Patricia Ann Preissig	155	Mahaffey, Annie Louise	145
Morris, Anne Darby	155	Nichols, Evalyn	
Naylor, Joan Fentress	155	Mildred Latham	145
Ables, Edna Sue Todd	150	Osteen, Susan Castles	145
Acree, Franklin Ferdinand	150	Rawls, Elizabeth Ann	145
Byrom, Charlotte Ann	150	Shelton, William Robert	145
Carter, Robert Henry	150	Smith, George Morley II	145
Climer, Linda Jo	150	Tiller, Sandra Lee	145
Davidow, Paula Sue	150	Welch, Judy Kay	145
Dudley, Sandra Grace	150	Binkley, Linda Gail	140
Easley, Melda Lynne	150	Bradsher, Patricia Louise	140
Essary, Mary Carla	150	Buzbee, Anita Carole	140

	<i>Honor Points</i>		<i>Honor Points</i>
Cummins, Marmaud Jo	140	Thompson, Martha	
Eakin, Marilyn Jean	140	Ann Culbertson	135
Greenfield, Jane Robyn	140	Underwood, T. Brown (Larry)	135
Hight, James Alexander Jr.	140	Wheeler, Pamela	135
Huff, Judith Timbs	140	Williams, Sharon Annette	135
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Gardner, Sarah Kathryn O'Hara	120	Watts, Kathleen Inez	120
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